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# The RT Review

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## NEW RESEARCH COULD USHER IN AGE OF 'SMART' BUFFERS

In the Delaware River Basin, degraded water is often associated with farming activities that contribute excess nutrients to waterways. This is particularly the case in the Brandywine-Christina River Basin of Chester and New Castle counties, which has one of the highest

amounts of nitrogen entering streams (nitrogen loads) in the eastern United States. One management approach to intercept nitrogen before it enters streams is to restore riparian (riverside) forest buffers. But one size does not fit all.

Deciding where to restore buffers is challenging, partly because of large spatial variability in nitrogen removal. The effectiveness of buffers is largely controlled by the width of the buffer combined with the hydrology, or how water flows across the landscape. However, current restoration strategies typically do not consider hydrology, and they generally use fixed-width buffers.

To guide restoration and conservation, we have developed a decision-support computer model. This model identifies the optimal locations for riparian forest buffers by considering hydrology. We have tested the model on the Brandywine-Christina River Basin. We are using Geographic Information Systems (GIS) software and we developed custom GIS routines. These model the flow of water and nitrogen across the landscape, and estimate the potential removal of nitrogen in riparian forest buffers.

Our GIS model can simulate different conservation scenarios, and we can calculate the amount of buffering needed to achieve desired reductions in nitrogen loads. The exciting aspect of our GIS model is that it allows us to compare different conservation strategies. This is important because riparian forest buffers have other benefits besides nitrogen removal. Planners may desire to have a minimum buffer width for these other ecosystem services, like stream temperature regulation and wildlife habitat. Using our model we can simulate alternative conservation strategies by combining a minimum fixed-width buffer with variable-width buffers. Our results show that using a variable-width buffer reduces the amount of area needed by 50%. This would be a major cost savings.

*(continued on page 3)*

30-meter, Fixed-width Buffer



10-meter, Fixed-width Buffer & Variable-width Buffer



These maps show part of the West Branch of the Red Clay Creek in Pennsylvania. Together they illustrate how combining fixed-width and variable-fixed buffers requires less buffer areas to achieve the same reduction in nitrogen beds.



The West Branch of the White Clay Creek flows through a livestock pasture outside New London, Pennsylvania. Current recommendations call for forested buffers no less than 100 feet wide. However, new research shows the benefits of varying the width of these buffers, while lowering costs.

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Spring is turning out to be very busy for RT in all three of our offices. We have a large increase of projects in North Jersey, including the major Phillipsburg project which is getting underway as approvals are received to proceed with site redevelopment. 2,000 construction jobs and 2,000 permanent jobs are projected to develop in the I-78 Logistics Center, which will allow next day delivery of internet-ordered goods throughout North Jersey, New York City, Western Long Island and Western Connecticut. RT Environmental Services has been working on the site since 2004. Tony Alessandrini is completing asbestos work on the site, and Gary Brown is LSRP for the redevelopment.

In the Kearny and Bayonne area, Chris Ward and Gary Brown are LSRPs working on redevelopment projects involving former industrial sites, and a number of smaller sites which were used for manufacturing or petroleum production in the Bayonne area.

Jen Berg is continuing work on the completion of the Bellmawr Waterfront Development Phase I area, which is expected to reach a point of Solid Waste Closure Certification in the next several months. Bellmawr Waterfront Development continues to receive materials in the Phase II and III redevelopment areas for soil reuse.

Chris Blosenski is working with Gary Brown on a central New Jersey expert case, where arsenic impacted soils were moved to another site which later resulted in claims and litigation.

Gary Brown is working on a second West Virginia expert project involving damages from a water line leak. Gary previously testified in another case in West Virginia involving wastewater line leakage impacting residential properties.

Justin Lauterbach is undertaking work at a number of pharmacy retail and donut retail sites, both in Pennsylvania and New Jersey. A significant percentage of the sites were former petroleum retail service stations, and involve remediation being closely coordinated with new development to hold down costs.

Walter Hungarter is working on a number of large redevelopment projects, some of which involve commercial space and a significant number of which involve residential redevelopment in the northern and western suburbs of the Greater Philadelphia area.

In New Jersey, RT continues work at a significant number of LSRP sites, with an average of three to four new LSRP sites coming in each month. A number of the sites involve solar energy facilities, most of which are being constructed in Central New Jersey.

Gary Brown and James Sieracki are continuing work on three projects involving stormwater issues, involving municipal storm sewer systems. Stormwater concerns and issues from stormwater systems are one of our biggest areas where we evaluate the existing systems, determine exactly what the complaints are and determine what the appropriate action is, given the potential plaintiff's complaints. Gary Brown spoke on this and related expert topics at the Pennsylvania Bar Institute Environmental Law Forum held at the Harrisburg Hilton in April.

For the Pennsylvania Chamber of Business and Industry, RT was the exclusive Diamond Sponsor at the annual Environmental Conference held in April in Lancaster. Attending the Conference were Walter Hungarter and John Lydzinski, and Gary Brown was Moderator for conferences on air emissions regulations and residual waste.

RT continues to sponsor key environmental events in Pennsylvania, including events in Harrisburg, Pittsburgh and Philadelphia for the Pennsylvania Environmental Council (PEC). Gary Brown is Treasurer of PEC, who is very influential when controversies arise over environmental laws and regulations. PEC provides well-respected input on policy issues as well. PEC is led by President Davitt Woodwell and long term lead Vice President in Philadelphia is Patrick Starr. John Walliser stays on top of policy and legislative issues as they emerge, in Harrisburg and elsewhere. You can reach PEC's Webpage at <http://pecpa.org/>.

A number of new projects are arising at a western PA former steel site as redevelopment of several areas gets underway, with Mining and Waste Program issues being coordinated. The operations RT supports from a consulting and permitting standpoint involve a former steel facility in Aliquippa, Pennsylvania.

RT appreciates the opportunity to be of service to its clients, and we are looking forward to more projects in 2016 and beyond.

Gary R. Brown, P.E., President

**LOUISE MANCUSO WOLF JOINS RT**

Louise Mancuso Wolf serves as the Director of Business Development for RT Environmental Services, Inc. in Pittsburgh. She brings 25 years of diverse experience in real estate and energy related industries specializing in business management and customer relationship development.

Prior to joining RT, Louise spent most of her career overseeing the business activities, financial controls, expansion and progression of profitable new business for both the commercial real estate and natural gas industries. Her key role with RT is to assess the current markets, network, and find opportunities for the growth and development of our

company working under the supervision of Justin Lauterbach.

Louise holds a Bachelors of Science in Business Administration majoring in Finance from Robert Morris University, Pittsburgh, PA. Louise is joining RT at an important time – as our Southwestern Pennsylvania business expands, we want to get proposals quickly to our clients to meet their needs. Please join us in welcoming Louise to the RT team of professionals.

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## New Research Could Usher in Age in 'Smart' Buffers (continued from page1)

apply it to other areas. Our geospatial "smart" buffer analysis will aid watershed managers to make well-informed decisions to restore riparian forest buffers and make waterways cleaner.

**Acknowledgment:** This work was partially funded by the Delaware Environmental Institute's Environmental Frontiers Grant Program.

**By:** Luc Claessens, Ph.D., Assistant Professor Thomas Santangelo, Graduate University of Delaware

*Now more than ever, we are recognizing the importance of water conservation and the need to mitigate our negative impacts on our precious watersheds. Unfortunately these*

*mitigation practices cost the taxpayer a pretty penny. Detailed problem solving is key, and in the case of establishing the most effective riparian forest buffers along stream ways in the Delaware River Basin, it is most reassuring to see that problem solving went an extra step. Not only are they establishing effective buffer zones to help reduce nitrogen loads entering streams but they are establishing it in the most cost effective way which can assure more money down the road for future environmental mitigation. This is an excellent example of careful and responsible environmental planning.*

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**EDITOR'S NOTE:** Thomas Santangelo won the Best Student Poster Award at the Delaware Estuary Science & Environmental Summit in January of 2015. In recognition of his accomplishment, the Partnership for the Delaware Estuary is pleased to share his research with Dr. Luc Claessens in Estuary News.

This article was published in Estuary News, Winter 2016, a Newsletter of the Partnership for the Delaware Estuary.



## RAILROAD TIES – MANAGING THE OLD ONES

Wood railroad ties account for over 90% of the more than 680 million crossties in use on US railroad track (others materials include concrete and plastic/composite). More than 16 million railroad ties are replaced each year and require disposal. This is not to mention the millions of railroad ties recovered from railroads which are no longer in use. Regulations exist on the federal, state and local levels with regard to used wood railway crossties. The rules are primarily in place due to the presence of creosote, although the volume of these ties also has an influence. The ties, which are manufactured from oaks and other hardwoods, are pressure treated with creosote, which, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is an approved registered pesticide. The railroad ties can also be treated with other chemicals.

The used ties are stored, recycled and/or disposed of, with the majority being shredded at processing yards and subsequently burned as

biofuel at cogeneration plants. In the past few years, many biomass power facilities have realized the benefits of these ties as an ideal fuel source with many benefits. Burning of railroad ties allows biomass boilers to operate more efficiently by complementing higher-moisture fuels such as forestry residues. In turn, this enhances healthy forests, promotes recycling for urban wood, allows states to meet renewable energy goals, and reduces methane emissions that would otherwise occur if the ties were left to decompose or be landfilled.

Burning of used crossties in facilities other than cogeneration plants (combined heat and power plants) is covered under Federal regulations. Regulations have been developed to address the improper burning of crossties which can emit toxic air pollutants generated from the wood preservatives in the ties. EPA recently finalized a rule which determined that there are three types of materials which are not considered

solid waste and can be burned as fuel in combustion units without triggering stringent hazardous waste combustion emission requirements. One of the materials included was creosote treated railroad ties. The rule specifically includes only those creosote treated ties, however there was an industry push to expand the types of preservative-treated railroad ties covered by the rule.

The EPA rejected inclusion of railroad ties treated with both creosote and borate in the rule, making the determination final. EPA did not agree that the definition of creosote treated railroad ties should also be expanded to include dual treated ties. EPA did, however, indicate that they may revisit the determination in the future.

Source: EPA Website

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## NJ - LOWER PASSAIC RIVER REMEDIATION OPTION SELECTED

The New Jersey Department of Environmental Protection proposed a remediation option for the Lower Passaic River which has been approved by EPA.

The remediation approach calls for dredging, capping, and disposal of contaminated materials at out of state facilities. The remediation approach for the Lower Passaic River has been contentious, and New Jersey's selected cleanup remedy is as follows:

- \* Remove and cap contaminated sediment to reduce the ongoing threat to human health and the environment;

- \* Stop the uncontrolled release and movement of contaminated sediments into Newark Bay and other parts of the estuary;

- \* Be consistent with reasonable long-term future uses of the Passaic River and adjacent areas, particularly its use as a navigable waterway;

- \* Remove and treat contaminated sediments consistent with the state's preference for out-of-state disposal to permanently and significantly reduce volume, toxicity and mobility of hazardous substances;

- \* Provide for management of the waste in a manner that will not add further burden to the surrounding communities' existing environmental issues.

The Passaic River was vital to America's industrial engine for more than 100 years, helping to bring thousands of jobs and economic prosperity to northern New Jersey and an emerging nation. Running through one of the most densely populated areas of the state, it also served as an important natural and recreational resource.

Due to its industrial past, Passaic River sediments contain many contaminants of concern, in particular dioxins associated with the production of Agent Orange at the former Diamond Alkali site in Newark. The lower Passaic River is considered one of the most contaminated rivers in the nation.

EPA previously has conducted two "hot spot" sediment removal efforts on the lower Passaic River. In 2012, it targeted removal of 40,000 cubic yards of dioxin-contaminated sediments adjacent to the Diamond Alkali Superfund site in the Ironbound section of Newark. In 2013, EPA required that responsible parties dredge the top 2 feet of dioxin-contaminated sediments in a half-mile of mudflats along the Passaic River in Lyndhurst and cap the remaining contamination.

To view the details of EPA's final remedy, and to view technical information regarding the need for the cleanup and different alternatives evaluated, visit:

<https://semspub.epa.gov/src/collection/02/AR63167>

## FEDERAL REGULATORY UPDATES

### THE OFFICE OF MANAGEMENT AND BUDGET CLEARS NON-WASTE FUEL RULE

The Office of Management and Budget recently completed work under the Resource Conservation and Recovery Act related to new categories of non-waste fuels. Following court activity early in 2015, certain determinations were made to expand the types of railroad ties deemed to be non-waste fuel. EPA also was reversing its position regarding the consideration of additional treated wood products to be on the list of non-waste fuel as part of future rulemaking.

The Final Rule is expected to add certain construction and demolition wood, creosote-treated railroad ties and certain paper recycling residuals to a list of non-hazardous secondary materials that can be used as non-waste fuel.

### ENVIRONMENTALISTS FILED SUIT IN FEDERAL APPEALS COURT REGARDING LINERS FOR ASH IMPOUNDMENTS

Environmental Groups filed an opening brief in a federal appeals court to force EPA to strengthen its RCRA Ash Impoundment Rule. The issue relates to having a liner mandate for sites receiving as much as 94% of ash sent to in-ground disposal sites.

Environmental groups arguing that because under the New Ash Rule that liners are required, there is no good reason not to require liners in existing facilities which continue to operate. EPA calculated that each unlined ash impoundment has a 36.2% lifetime risk of leaking.

### FLORIDA'S CLEAN WATER ACT DEGRADATION RULES SUBJECT TO LITIGATION

Environmentalists are suing EPA for approving Florida's Clean Water Act Rules, which are focused on preventing degradation in several significant waters including the Everglades. The environmental group involved, Federal Wildlife Federation, sued because the group believes that water law offers little guidance on what state anti-degradation rules must contain. It is alleged that EPA does not have the authority to approve Florida DEP's incomplete Clean Water Act.

We will keep you informed as this case proceeds.

### EXXON WINS REFINERY AIR CASE

Exxon operates the largest refinery in the United States in Texas and the company took steps to address emission limit exceedances at its refinery. In a court decision on December 17th, the court found that one-time air law violations did not necessarily constitute a significant problem if the company was simply

taking steps to address potential violations.

For many years, questions arose that when there are temporary air incursions, are those incursions considered major violations or was the company taking action at the time of the incursions to address short term items of little environmental concern? Emissions from refineries which have air toxics have been the subject of lawsuits by environmental groups, but court observers believe that the recent ruling in Texas will make it harder for citizen suits to be filed, when there are only short-term emissions issues of limited overall environmental concern.

*(Inside EPA – 12-24-15)*

### AMERICAN PETROLEUM INSTITUTE FAULTS EPA COMPLIANCE PLAN FOR OIL AND GAS POLICY

The EPA in 2015 issued a "Next Generation" Group of Compliance Tools in its proposed Methane Emissions Rule for new oil and gas drilling. However, the American Petroleum Institute has commented on the Proposed Rule that it is not appropriate for EPA to require non-EPA entities to perform EPA responsibilities. EPA also believes that the New Source Performance Standard proposed measures are unnecessarily punitive.

The key issue is that in early 2015, EPA floated the idea of "Next Generation" Compliance Rules, which now appear to be proposed for change to become compliance mechanisms.

### EPA AND USGS AGREE – COAL-TAR SEALANTS ARE A MAJOR SOURCE OF PAHS

The Pavement Coating Technology Council made a request to EPA to correct information on its Website, as EPA had endorsed USGS findings that coal-tar pavement sealants are the largest source of PAHs in urban lakes.

In a response to the Pavement Coating Technology Council, EPA says it will modify language on its Websites to better emphasize that there are numerous sources of PAHs, but the underlying findings of the US Geological Survey, who evaluated sediment data using new methodology, are considered appropriate for EPA to continue to post on its Webpage. EPA declined to withdraw the information and defends the quality, objectivity and transparency of the USGS studies.

### EPA HAS DECIDED WHICH NEW CHEMICALS WILL BE REGULATED IN DRINKING WATER

The Safe Drinking Water Act (SDWA) directs EPA to publish a list of contaminants (referred to as the Contaminant Candidate List, or CCL) to assist in priority-setting efforts.

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- Coal Tar Sealants, pg. 4
- FL Degradation Rules, pg. 4
- MS-4 General Permit Controversy, pg. 4
- TCE Use Restriction, pg. 7

SDWA also directs the Agency to select five or more contaminants from the current CCL and determine whether to regulate these contaminants with a National Primary Drinking Water Regulation (NPDWR).

EPA further reduces human health risks by studying the presence of selected unregulated contaminants in drinking water every five years. EPA then determines whether to regulate the unregulated contaminants. On October 20, 2014, the agency released preliminary determinations to regulate strontium and not to regulate dimethoate, 1,3-dinitrobenzene, terbufos, and terbufos sulfone. On January 4 of this year, EPA has made a final regulatory determination not to issue a national primary drinking water regulation for dimethoate, 1,3-dinitrobenzene, terbufos, and terbufos sulfone because they are not occurring, or occur infrequently in drinking water. However, the agency is not making a final regulatory determination for strontium at this time.

The Agency based its decision to delay a final determination for strontium on public comments received and plans to further evaluate scientific information that became available after publication of the preliminary regulatory determinations. By delaying action, the Agency says that it will be able to use the best available science to conduct additional scientific analyses to determine if there is a need to develop a national drinking water regulation for strontium.

*(Environmental Resource Center – 1-11-16)*

### EPA PROPOSES REVISIONS TO RISK MANAGEMENT PROGRAM REGULATIONS

The EPA is proposing to revise its Risk Management Program (RMP) regulations to improve chemical process safety, assist local emergency authorities in planning for and responding to accidents, and improve public awareness of chemical hazards at regulated sources.

"Chemicals are a necessary part of our everyday lives; however, as we have too often seen they can cause loss of life, injury and significant property damage," said Mathy Stanislaus, EPA's assistant administrator for the Office of Land and Emergency Management. "It is these dangers that we are working to prevent and minimize as we propose revisions to the RMP, such as improving our prevention program requirements, ensuring coordination with first responders,

## FEDERAL REGULATORY UPDATES (Continued)

and ensuring that accident planning protects local communities that need to evacuate or shelter-in-place during an accident.”

While numerous chemical plants are operated safely, in the last 10 years more than 1,500 accidents were reported by RMP facilities. These accidents are responsible for causing nearly 60 deaths, some 17,000 people being injured or seeking medical treatment, almost 500,000 people being evacuated or sheltered-in-place, and costing more than \$2 billion in property damages.

The Accidental Release Prevention regulations under section 112(r) of the Clean Air Act (CAA), also known as the EPA RMP regulations, require covered facilities to develop and implement a risk management program. The proposed revisions to EPA's RMP regulations is a key action item under President Obama's Executive Order (EO) 13650, Improving Chemical Facility Safety and Security. EPA shares RMP information with state and local officials to help them plan for and prevent chemical accidents and releases.

This proposal is the result of a review undertaken to modernize the existing EPA RMP and information gathered from feedback obtained during listening sessions, Webinars, meetings with stakeholder groups, stakeholder conferences and public comments in response to EPA's Request for Information.

The proposed amendments are intended to improve existing risk management plan requirements to enhance chemical safety at RMP facilities by:

- Requiring the consideration of safer technologies and alternatives by including the assessment of Inherently Safer Technologies and Designs in the Process Hazard Assessment
  - Requiring third party audits and root cause analysis to identify process safety improvements for accident prevention
  - Enhancing emergency planning and preparedness requirements to help ensure coordination between facilities and local communities
  - Strengthening emergency response planning to help ensure emergency response capabilities are available to mitigate the effect of a chemical accident
  - Improving the ability of LEPCs (Local Emergency Planning Committees) and local emergency response officials to better prepare for emergencies both individually and with one another; and
- Improving access to information to help the public understand the risks at RMP facilities.

(*Environmental Resource Center – 2-29-26*)

*In addition to the explicit benefits from improving the RMP Program, secondary benefits will result from facilities that have been dealing with RMP since it went into effect in the 1990s now having to re-examine*

*their RMP Program. Undoubtedly, personnel dealing with RMP Programs have changed over the years and newer people don't always have the same perspective and understanding on the importance of a good Program for the health and safety on the facility and its neighbors. The revisions will also help emergency personnel review their plans for responding to an incident and assure that no changes or improvements are needed.*

*For further information on RMP Programs, please contact Lawrence Bily at 610-265-1510 x236, or lbily@rtenv.com.*

### **EPA ISSUES DRAFT NPDES PESTICIDE GENERAL PERMIT FOR POINT SOURCE DISCHARGES FROM THE APPLICATION OF PESTICIDES**

All ten EPA Regions are proposing for public comment the draft 2016 National Pollutant Discharge Elimination System (NPDES) pesticide general permit (PGP)—the “draft 2016 PGP.” The draft 2016 PGP covers point source discharges from the application of pesticides to waters of the United States. Once finalized, the draft 2016 PGP will replace the existing permit that will expire at midnight on October 31, 2016.

The draft 2016 PGP has the same conditions and requirements as the 2011 PGP and would authorize certain point source discharges from the application of pesticides to waters of the United States in accordance with the terms and conditions described therein. EPA proposes to issue this permit for five years in all areas of the country where EPA is the NPDES permitting authority. EPA solicits public comment on all aspects of the draft 2016 PGP.

This Federal Register notice describes the draft 2016 PGP in general and also includes specific topics about which the Agency is particularly seeking comment. The fact sheet accompanying the permit contains supporting documentation. EPA encourages the public to read the fact sheet to better understand the draft 2016 PGP. Comments on the draft 2016 PGP must be received on or before March 11, 2016.

(*Environmental Resource Center – 2-1-16*)

### **CLEAN WATER CONTROVERSY CONTINUES**

In late March, a three-judge panel in the Murray Energy, et al. v. EPA case issued a divided ruling over who has authority to hear suits over the EPA Clean Water Act Rule. The current issue is whether suits should be heard in appeals courts or in lower district courts.

Georgia Industry groups whose filing called for a ruling, believes that there is now a 1-1-1 decision, causing legal confusion and leading

at times to “divergent results.” There is concern that national uniformity is being lost.

### **EPA PRESSURE TO ESTABLISH UNIFORM GUIDANCE ON PERFLUOROOCCTANOIC ACID (PFOA)**

The chemical PFOA has been found in a number of public and private drinking water wells in the Northeast. EPA headquarters has not made any announcements of whether to apply a uniform stringent contamination level and the State Governors are concerned that with no enforceable standard, not having uniform guidance on PFOA will lead to confusion on how to protect water supplies.

At RT Review press time, it was not clear when or if EPA would respond.

### **CONTROVERSY OVER MS-4 GENERAL PERMITS**

The states and utilities are split over EPA's Plan to revise General Permit application procedures for municipal separate storm sewer systems. The issue relates to how states would oversee SWMPs.

The Association of Clean Water Administrators which represents many state water regulators has stated that EPA has not provided specific rule text, which is a fundamental flaw in the rulemaking proposal. Other comments are that EPA's approach could cause an “exponential” increase in work involving reviewing permit applications.

### **CLEAN WATER ACT JURISDICTION ORDER QUESTIONED BY THE ARMY CORPS OF ENGINEERS**

The Army Corps of Engineers urged the Supreme Court to reject those seeking to allow pre-enforcement judicial review of regulated or findings as to whether particular waters are covered by the Clean Water Act. The issue regarding the Clean Water Act jurisdiction continues to get more complicated and we will keep you informed of this in the *RT Review*.

### **NEW REGULATIONS FOR NATURAL GAS TRANSMISSION PIPELINES**

The DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) recently announced proposed regulations to update critical safety requirements for natural gas transmission pipelines. The proposed rule would broaden the scope of safety coverage both by adding new assessment and repair criteria for gas transmission pipelines, and by expanding these protocols to include pipelines located in areas of medium population density, or “Moderate Consequence Areas,” (MCAs) where an incident would pose risk to human life. The proposed rule provides pipeline operators with regulatory certainty, and

## FEDERAL REGULATORY UPDATES *(Continued)*

responds to both Congressional mandates and outside safety recommendations.

The proposed regulations address four congressional mandates from the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, one GAO recommendation and six NTSB recommendations, including the recommendation adopted in the wake of the San Bruno explosion that pipelines built before 1970 be tested. Pipelines built before 1970 are currently exempted from certain pipeline safety regulations because they were constructed and placed into operation before pipeline safety regulations were developed. In its investigation of the PG&E natural gas pipeline failure and explosion in San Bruno, CA, the National Transportation Safety Board concluded that hydrostatic testing of grandfathered pipelines would have likely exposed the defective pipe that led to the pipeline failure.

The proposed changes provide pipeline operators with regulatory certainty that they need when making decisions and investments to improve gas transmission infrastructure, and address priorities outlined as part of the Climate Action Plan to reduce methane emissions. The proposed changes to gas transmission safety regulations are expected to result in fewer incidents, which could lead to a reduction in gas released into the atmosphere as greenhouse gases (GHGs). The proposed rule is expected to result in net annual average reductions of 900-1,500 metric tons of carbon dioxide and 4,600-8,100 metric tons of methane, a powerful GHG. The rule also proposes changes to the way that pipeline operators secure and inspect gas transmission pipeline infrastructure following extreme weather events, such as hurricanes and flooding.

In addition to the specific requirements mentioned above, the rulemaking proposal would revise and strengthen federal Pipeline Safety Regulations by:

- Modifying repair criteria for pipelines inside and outside of high consequence areas
- Providing additional direction on how to evaluate internal inspection results to identify anomalies
- Clarifying requirements for conducting risk assessment for integrity management, including addressing seismic risk
- Expanding mandatory data collection and integration requirements for integrity management, including data validation and seismicity
- Requiring additional post-construction quality inspections to address coating integrity and cathodic protection issues
- Requiring new safety features for pipeline launchers and receivers
- Requiring a systematic approach to verify a pipeline's maximum allowable operating pressure (MAOP) and requiring operators to

report MAOP exceedances

The notice of proposed rulemaking has been transmitted to the Federal Register for publication. For more information on the U.S. DOT's efforts to improve pipeline safety and awareness, including details about the proposed rule, visit the PHMSA website at: <http://www.phmsa.dot.gov>.

*(Environmental Resource Center – 3/21/16)*

### COAL ASH DISPOSAL RULE

EPA is in talks to address both environmentalists and industry legal challenges related to the Coal Ash Disposal Rule. A key issue is focused on a "loop hole" which allows facilities which cap and dry out coal ash former disposal sites by April 7, 2018 to avoid groundwater monitoring mandates.

### CHESAPEAKE BAY TMDL

The Chesapeake Bay TMDL EPA strategy has been challenged by a number of groups, including home builders.

A petition submitted by the groups will not be heard by the Supreme Court. In essence, the EPA can now work with states to craft novel Clean Water Act TMDL strategies.

### NEW RULE ON REVERSE LOGISTICS OF HAZARDOUS MATERIALS

The DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) is amending the Hazardous Materials Regulations (HMR) by adopting streamlined requirements for the safe return (reverse logistics) of certain hazardous materials from a retail outlet back to a distribution or reclamation facility by highway transportation. The rule specifically excludes hazardous waste and shipments that are subject to special permits.

This final rule defines reverse logistics as "the process of offering for transport or transporting by motor vehicle goods from a retail store for return to its manufacturer, supplier, or distribution facility for the purpose of capturing value (e.g., to receive manufacturer's credit), recall, replacement, recycling, or similar reason" and provides provisions for the safe shipment of hazardous materials within the scope of this definition. The rule streamlines the requirements shipments of limited quantities of most hazardous materials from retail stores back to suppliers. When shipped by non-private carriers, they must be marked as limited quantities, or when shipped by private carriers, they must be marked with either the words "REVERSE LOGISTICS – HIGHWAY TRANSPORT ONLY – UNDER 49 CFR 173.157" or as limited quantities.

This rule also expands a previously existing exception for return shipments of lead acid batteries from single to multiple shippers on a

single transport vehicle for the purpose of recycling.

Employees must either be trained or given clear instructions on preparing the reverse logistics shipments. The instructions must include information on how to properly classify, package, mark, offer, and transport reverse logistics shipments. The instructions must be provided by the supplier, manufacturer, or distributor to ensure that each shipment is correctly prepared for transportation, or through hazardous material training. If instructions are provided outside the scope of hazardous materials training, the employer must identify hazardous materials subject to the reverse logistics rule, verify compliance with the appropriate conditions and limitations of the rule, and ensure that employees receive clear instructions from the manufacturer, supplier, or distributor associated with product's origination or destination.

The clear instructions must be provided to and accessible by employees at the time they prepare reverse logistics shipments, and the employer must document that employees are familiar with the requirements of the rule and specific return instructions for the products shipped. Documentation must be retained as long as the employee is employed and 60 days thereafter. For on-site training, or the development of clear instructions that can be used as an alternative to training, contact Environmental Resource Center.

The final rule is being posted in the Federal Register.

*(Environmental Resource Center – 3-28-16)*

### EXAMINING OIL AND GAS SITES

EPA is attempting to gather information on oil and gas operations, focusing on "super emitters".

An announcement and Fact Sheet were issued on March 10th, indicating that the Agency is attempting to identify sources with high emissions and factor which cause those high emissions.

There is also a separate proposal from the Bureau of Land Management seeking to limit "waste" methane from oil and gas separations on Federal Lands. This would address storage tanks and liquids uploading.

### EPA TO REQUIRE REDUCED METHANE EMISSIONS FROM THE OIL AND NATURAL GAS INDUSTRY

Methane, the key constituent of natural gas, is a potent greenhouse gas (GHG) with a global warming potential more than 25 times that of carbon dioxide. Methane is the second most prevalent GHG emitted in the United States from human activity—and nearly 30% of those emissions come from oil production

## FEDERAL REGULATORY UPDATES *(Continued)*

and the production, processing transmission, and distribution of natural gas. Methane from the oil and gas industry comes packaged with other pollutants, including volatile organic compounds (VOCs) that help form harmful smog, and a number of harmful pollutants known as air toxics.

As part of the Obama Administration's commitment to addressing air pollution and climate change, EPA announced its next step in reducing emissions of methane from the oil and natural gas industry: moving to regulate emissions from existing sources. The agency will begin with a formal process to require companies operating existing oil and gas

sources to provide information to assist in the development of comprehensive regulations to reduce methane emissions.

An Information Collection Request (ICR) will enable EPA to gather important information on existing sources of methane emissions, technologies to reduce those emissions and the costs of those technologies in the production, gathering, processing, and transmission and storage segments of the oil and gas sector.

There are hundreds of thousands of existing oil and gas sources across the country; some emit small amounts of methane, but others emit very large quantities. Through the ICR, EPA will be seeking a broad range of informa-

tion that will help us determine how to effectively reduce emissions, including information such as how equipment and emissions controls are, or can be, configured, and what installing those controls entails.

EPA will also be seeking information that will help the agency identify sources with high emissions and the factors that contribute to those emissions. The ICR will likely apply to the same types of sources covered by the current and proposed New Source Performance Standards for the oil and gas sector, as well as additional sources.

*(Environmental Resource Center – 3-14-16)*

### EPA RESTRICTS USE OF TCE

After an EPA's assessment of trichloroethylene or TCE showed risk, the sole manufacturer of a fixative product using TCE voluntarily withdrew it from the marketplace. EPA is now taking action to ensure no other manufacturers, including importers, enter the marketplace before EPA has the opportunity to prohibit or limit these uses.

"EPA commends PLZ Aeroscience Corporation for removing TCE from its arts and crafts spray fixative product," said Jim Jones, assistant administrator for the office of chemical safety and pollution prevention. "EPA is putting into place a level playing field to ensure importers and domestic manufacturers do not re-enter the marketplace before EPA has an opportunity to review."

In a separate regulatory action under the Toxic Substances Control Act, EPA aims to reduce the risks from TCE in aerosol and vapor degreasing and as a spot cleaner in dry cleaning facilities.

The recent rule, known as a Significant New Use Rule (SNUR), requires anyone intending to initiate manufacture, including the import or processing of TCE for new uses to notify EPA at least 90 days before doing so. The notification will allow EPA to evaluate the intended use and to take appropriate action.

The TCE spray fixative product was used by artists, picture

framers, graphic designers and printers to provide a water repellent and protective finish.

EPA's June 2014 Work Plan Chemical Risk Assessment for TCE identified health risks associated with several TCE uses, including the arts and craft spray fixative use, aerosol and vapor degreasing, and as a spotting agent in dry cleaning facilities. In 2015, EPA worked with the only U.S. manufacturer of the TCE spray fixative product, PLZ Aeroscience Corporation of Addison, Illinois, resulting in an agreement to stop production of the TCE containing product and to reformulate the product with an alternate chemical.

A few current uses of TCE, such as use in cleaners and solvent degreasers, film cleaners, lubricants, mirror edge sealants, and pepper spray, are not subject to the final rule.

This final rule is effective 60 days after the date of publication in the Federal Register. Once published, the publication can be found in the Federal Register docket at : <http://www.regulations.gov> by searching for EPA-HQ-OPPT-2014-0697.

A pre-publication copy of the final rule and more information can be found at: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/trichloroethylene-tce>.

*(Environmental Resource Center – 4-11-16)*

### EPA ISSUES CONCERNS ON NEW JERSEY'S STORMWATER MANAGEMENT PLAN

The New Jersey Department of Environmental Protection has rules which would change the State's Coastal Management Rules, Stormwater Management Rules and Flood Hazard Area Control Rules. The State believes that changes will help streamline permitting and bring predictability to environmental regulations. One change would allow stormwater discharges within 300 feet of a riparian zone if the applicant can show that stormwater discharges outside the riparian zone would result in greater erosion or other environmental impacts. However, EPA, Environmentalists and some New Jersey Legislators believe the proposal violates anti-backsliding provisions of the Clean Water

Act because they would effectively reduce or eliminate riparian buffers. A Resolution regard the Rulemaking passed the State Senate and the Assembly's Environmental Committee voted five to zero to advance the Bill in December. EPA appears to have an inconsistent position on the Rules, in one instance indicating that after discussions with DEP that there are few concerns, but then later a letter was issued to State Senator Raymond Lesniak indicating that there still are significant zones.

We will keep you informed on this issue as Rulemaking is expected to continue in 2016.

## PA UPDATES

### PENNSYLVANIA TV RECYCLING OPERATIONS SHRINK

The Pennsylvania Resource Council has indicated that according to their facts and figures, TVs brought in for recycling are no longer accepted at many electronics recycling locations. Six facilities announced that they were no longer accepting TVs, including five counties around Philadelphia. Additionally, Best Buy, which is a larger retailer of consumer electronics and has 37 Pennsylvania locations, also stopped accepting TVs for recycling citing excessive costs.

The expected life of a television is five to seven years and unfortunately, the frequent outcome of such reduced recycling options is for materials to be placed in trash cans which are frequently emptied without a visible indication of the contents of the trash container.

Under the 2010 Recovery Device Recycling Law, electronics manufacturers are required to pay for a specific amount of recycling waste electronics. Through the success of the electronic waste recycling programs, the collection of E-waste volume exceeded many more times than the law required electronics manufacturers to pay for recycling.

House legislation is proposed to revamp the 2010 Recovery Device Recycling Wall such that electronics manufacturers pay for significantly more of the costs associated with the actual volume collected waste electronics materials.

-Craig Herr, P.G.  
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610-952-3730

### PADEP BUREAU OF MINING UPDATES PRE-APPLICATION LIST

The Pennsylvania Department of Environmental Protection updated its Pre-Application Review List, and the Bureau stresses the importance of Pre-Application meetings at DEP when any major modifications or New Permit Applications are submitted for surface mines.

As many surface mines have original permits which are dated, discussing with DEP what needs to be submitted for a major permit application or for an expanded new surface mine is important. A link to the Checklist can

be found below.

[www.elibrary.dep.state.pa.us/dsweb/Get/Document-106429/5600-PM-BMP...](http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-106429/5600-PM-BMP...)

### HANDLING AND USE OF EXPLOSIVES IN PENNSYLVANIA

Regulations in Pennsylvania have recently been revised to address the use of explosives for seismic exploration. There had been different types of regulations in effect, depending on what the exploration was to be conducted for (for example, mining or for construction).

For your information:

The Environmental Quality Board (EQB) published the above-referenced regulation in the Pennsylvania Bulletin on February 27, 2016.

The proposed regulation is available on the Pennsylvania Bulletin Website at the following link.

<http://www.pabulletin.com/secure/data/vol46/46-9/index.html>

The proposed regulation is also available at the following link.

<http://www.irrc.state.pa.us/regulations/RegSrcHrslts.cfm?ID=3149>

### PENNSYLVANIA RULING AIDS LEGAL CERTAINTY FOR BIOSOLIDS LAND APPLICATION

A late December ruling by the Pennsylvania Supreme Court found that biosolids application fits into "Normal Farming", in states which have right to farm laws.

The ruling was unanimous in Gilbert vs. Synagro as there was a nuisance suit that biosolids recyclers damage properties. The suit was brought by 24 landowners in York County, Pennsylvania. The Court said that land application projects are "normal agricultural operations," and nuisance claims are not possible where the right to farm laws are in effect.

### PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES UPDATE – PNDI SEARCHES

The Pennsylvania National Diversity Inventory (PNDI) is used to search for potential impacts to threatened, endangered and special concerns species, as well as special

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concern resources in Pennsylvania. Effective immediately, a new tool is being used, which is called the Pennsylvania Conservation Explorer (PACE), which is an ArcGIS server-based interactive mapping application that combines conservation planning and the former PNDI environmental review.

If the new tool is used, there is a \$40 charge, for the receipt of the evaluation. However, for those who do not have access to a computer or those who do not wish to use the PNDI Receipt system, may submit requests directly to the DCNR, the Game Commission, the Fish and Boat Commission and the United States Fish and Wildlife Service.

The DCNR states in their "Policy for the Imposition of Fees for PNDI Receipts Generated Through the PA Conservation Explorer" in the PA Bulletin, on September 19th 2015 (45 Pa. B. 5688), that there are exemptions available to the \$40 fee. The exemptions apply to federal, state, and local government agencies that are utilizing the program for normal day activities. Additionally, the DCNR allows the fourteen universities of the Pennsylvania System of Higher Education or the state-related universities (i.e. Penn State, University of Pittsburgh, etc.)

*This new tool will help organizations better plan for conservation of habitats that fall within their planned project. PACE will visibly show the user the approximate location of a habitat that needs to be protected. Previously, the PNDI environmental review only had federal or state agencies notify the user of a potential issue without depicting the approximate location of the issue. With the location of the habitat depicted on a map within the proposed project, users will be able to more efficiently plan and adjust their projects to keep them on the desired timelines.*

*For more information, you can contact Chris Blosenski at 724-674-9089 or by e-mail at: [cblosenski@renv.com](mailto:cblosenski@renv.com)*

### WEST VIRGINIA COAL TMDL

The West Virginia Coal Association is challenging the TMDL process by stating that environmental organizations forcing TMDL issues over a measure of toxicity (conductivity) associated with mining surface water quality lacks a legal trigger. West Virginia itself punted on listing impaired waters for conductivity because it believes that a TMDL has to identify specific pollutants causing the impairment; and that it is not possible to set

appropriate impairment limits unless there are specific pollutants involved.

There are complicated issues involving prioritization of TMDLs, but it appears that using "conductivity," which is an indicator and not a specific pollutant from a water quality standpoint, may have been a mistake.



## NJ UPDATES

### BALD EAGLE POPULATION IN NEW JERSEY CONTINUES TO THRIVE

Bald Eagles, which are known as the species Raptors, are continuing to thrive in New Jersey. A non-profit group, Conserve Wildlife Foundation of New Jersey, released information on 2015 populations and there are a reported 161 pairs of Bald Eagles counted. In the early 1980s, about two decades after reduction of widespread use of DDT, there was only a single counted nest. According to David Wheeler, Conserve Wildlife Foundation Executive Director, the ongoing dramatic recovery of Bald Eagles is inspiring many biologists who keep an eye on the countings.

Thirteen new Eagle pairs were found in the most recent season – nine in South Jersey, two in Central Jersey and two in North Jersey. The Delaware Bay Region remained the State's Eagle stronghold, with 40% of all nests located in Cumberland and Salem Counties.

The Federal Government removed the Bald Eagle from its list of Endangered Species in 2007, but New Jersey considers Bald Eagles to be State Endangered during the breeding season, and State Threatened during the non-breeding season.

The New Jersey Department of Environmental Protection Division of Fish and Wildlife Endangered and Nongame Species program leads Eagle recovery efforts in New Jersey. The Program started in the 1980s. The State's Eagle population would not be thriving without the efforts of dedicated Eagle volunteers who observe nests, report sightings and help protect critical habitat.

*(South Jersey Times – 1-17-16)*

### NEW JERSEY LOWERS DIOXANE AND PFA CLEANUP LEVELS

New Jersey revised its groundwater criteria for 1,4 – dioxane to 0.01 parts per billion. DEP set an interim groundwater criterion at that level because it considers the compound carcinogenic. In another recent revision,

NJDEP modified the cleanup criterion for per-fluorononanoic acid (PFA) based on a problem found at a Southern New Jersey plant where impacted groundwater was found leaving a site where the compound used in manufacturing. DEP finds the compound “extremely persistent” in the environment. Notices by the company that owns the manufacturing plant have been given to nearby groundwater users.

*(Inside EPA – 12-14-15)*

### NEW JERSEY CONSIDERS MOLD LEGISLATION

A new Bill, A381, has been introduced in the current session of the New Jersey Legislature, which is supposed to establish procedures for inspection of an abatement of mold hazards in residential buildings and school facilities. There would be certification programs for both mold inspectors and mold hazard abatement workers.

Previous mold legislation in 2014 in New Jersey was conditionally vetoed by Governor Christie.

### NEW REGULATIONS – NEW JERSEY SITE REMEDIATION PROFESSIONAL LICENSING BOARD

The Site Remediation Professional Licensing Board issued regulations in January which, in part, regulate the conduct of Licensed Site Remediation Professionals.

Copies of both the Adoption document and the new rules are available on the Board's web site at:

<http://www.nj.gov/lrspboard/board/rules/>. The Adoption document includes the Board's response to comments received on the January 5, 2015 rule proposal.

### USE OF ONLINE PORTAL FOR SUBMITTAL OF REMEDIAL INVESTIGATION REPORTS

NJDEP now requires that Remedial Investigation Reports only be submitted

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- Dioxane and PFA Cleanup Levels, pg. 9
- LSRP Board - New Regulations, pg. 9

through their online portal. The effective date for this change was on April 3, 2016.

### IMPLEMENTATION OF NOVEMBER 25, 2015 INTERIM GROUNDWATER QUALITY STANDARDS

NJDEP has issued responses to frequently asked questions regarding a number of compounds which have interim groundwater standards. Compounds which are involved include:

#### CONTAMINANTS (No Prior Ground Water Quality Standard)

1-Chloro-1,1-difluoroethane  
Cresols (mixed isomers)  
1,1-Dichloro-1-fluoroethane  
1-Methylnaphthalene  
Perfluorononanoic acid (PFNA)  
Strontium  
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)  
Tri-cresyl phosphate (mixed isomers)  
1,1,1-Trifluoroethane  
1,2,4-Trimethylbenzene  
Tri-ortho-cresyl phosphate

#### CONTAMINANT (Prior Standard - Order of Magnitude Change)

1,4-Dioxane  
The NJDEP has responded to such questions as if compounds are found for the first time, will there be extensions of dates for completing delineation and/or remediation?...How will certifications of laboratories be affected?...Are all compounds involved included in the TCL/TAL list?

Contact Chris Ward at 856-467-2276, should you have any questions.

### COMPANIES CHALLENGE EPA'S DEFINITION OF SOLID WASTE RULE

In a Petition filed by the American Petroleum Institute and others last December, a number of companies and the American Petroleum Institute challenged a number of fundamental aspects of EPA's Rule regarding the disposal of solid waste. Among other issues the companies believe that factors EPA cited in the Recycling Rules unlawfully regulate non-discarded materials that are central to the manufacturing process. It is also indicated that industry believes EPA cannot declare material to be “discarded” on the basis of non-comparable constituent levels unless the materials involved were adulterated.

A fundamental tenet of the challenge is that EPA is attempting to regulate materials that have not even been discarded.

It is also stated that EPA lacks a “record basis” that it must meet, as the EPA's proposed definition of Solid Waste Rule revisions do not fit together with over 20 rules issued previously. Lastly, the companies believe that EPA's Rulemaking is especially burdensome, in many instances infeasible to comply with, and undeniably invasive of the manufacturing operation.

We will keep you informed of this important challenge.

### PA DEP - RATES TO BE USED TO CALCULATE BOND AMOUNTS FOR MINING WATER REPLACEMENT

The Pennsylvania Department of Environmental Protection recently announced rates that are to be used to calculate bond amounts for water replacement. Inflation factors were applied and DEP calculated the rate of inflation rate of return using five year averages.

The announcement on the new Guidance was printed in the *Pennsylvania Bulletin* on March 5, 2016, and the Guidance Document is number 562-4000-102. The rates to be used are effective now.

## TECHNOLOGY UPDATES

### NEW YORK STATE CONSIDERS MAJOR OVERHAUL OF SOLID WASTE RULES

New York's Governor recently announced a planned overhaul of the State's Solid Waste Regulations. The Regulatory Program was originally authorized in 1973, and the New York Department of Environmental Conservation will look at experience-based changes and expansion of options for reuse of fill and other material.

With respect to beneficial use determinations:

To further their goal of prioritizing reuse, recycling, and other forms of resource recovery, DEC has also promulgated new criteria for Beneficial Use Determinations ("BUD") as part of their rule proposal. BUDs—both predetermined and case specific—eliminate regulatory jurisdiction over waste materials used for an

alternate, beneficial manner. Under the proposed rules, DEC is promoting additional pre-determined BUDs for recyclable materials, compost, and construction and demolition (C&D) debris, which would permit certain uses of these materials without further departmental approval. For example, the new rules permit the use of C&D debris as fill material without requiring a case specific determination to be made. The rules have also added new case-specific BUD standards for the use of produced brine water—a byproduct of oil and gas drilling—as an ice and dust control measure.

The most apparent change brought by the proposed rules is their attempt to comprehensively reorganize the regulations of solid waste facilities and transporters. The legislature first authorized DEC to produce rules for the management of solid waste facilities in 1973, with

### TECHNOLOGY UPDATES

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the first iteration of Part 360 appearing in 1988. (ECL 27-0701, legislative history.) In pursuit of more efficient and more broadly applicable rules, the regulations under Parts 360, 364, and 369 have been amended in a piecemeal fashion over the course of the last two decades. With each additional amendment—eleven since 1993 in the case of Part 360—the rules themselves became more muddled. This has resulted in a highly complicated and convoluted regulatory regime, with numerous definitions sections, cross-references to sections that have since been repealed, and some provisions that directly contradicted each other.

*(E2 Law Blog – 3-11-16)*

### OSHA ISSUES CONTROVERSIAL FINAL RULE ON SILICA DUST EXPOSURE

The Occupational Safety & Health Administration (OSHA) finally issued its final rule for occupational exposure to respirable crystalline silica this morning. The final rule has two standards, one for general industry and maritime and the other for construction, as expected. The proposed rule was issued back in September 2013. There have been quite a few changes made to the final rule from what was proposed two and a half years ago.

Silica, also known as silicon dioxide, is a chemical compound that occurs in nature as a basic component of sand and quartz. Respirable crystalline is created during work operations involving stone, rock, concrete, brick, block, mortar and industrial sand. The current rule, put in place in 1971, set permissible exposure limits (PELs) for crystalline silica in general industry, construction and shipyards. OSHA claims these levels are outdated, inconsistent between industries and do not adequately protect worker health.

Inhalation of crystalline silica dust can lead to bronchitis, silicosis and lung cancer. Silicosis is an occupational lung disease that can cause scarring of the upper lobes of the lung, inflammation and fluid buildup. There is no cure for silicosis as it is an irreversible condition however treatment is available to improve lung function and reduce inflammation. Sufferers of silicosis also have a higher susceptibility to contracting tuberculosis.

The final rule reduces the current PEL of respirable crystalline silica from 250 micrograms per cubic meter of air (µg/m<sup>3</sup>) averaged over an 8-hour period down to 50 µg/m<sup>3</sup>. OSHA claims the new rule will save the lives of 642 employees and prevent 918 cases of moderate-to-severe silicosis a year across all industries. It's estimated that approximately 2.0 million construction workers will be affected by the final rule.

In the proposed rule, the construction standard laid out engineering and work practice control methods for 13 specific tasks that could be used to avoid having to monitor the air for silica levels. In the final rule, those 13 tasks have been expanded to 18 and also includes any required respiratory protection and minimum assigned protection factors. OSHA has acknowledged that conducting exposure assessments can be burdensome which is why they are emphasizing the use control methods as opposed to the alternative exposure control methods which would require either a performance option or a scheduled monitoring option. As long as employers fully and properly implement the prescribed controls, they won't have to demonstrate compliance with the PEL since those controls provide an equivalent level of protection.

Other requirements in the construction standard include having a written exposure control plan that will be implemented by a competent person who will conduct regular and frequent inspection of jobsites, materials and equipment. The standard covers all occupational exposures to respirable crystalline silica in construction work where the action level will be met. The action level is 25 µg/m<sup>3</sup> as a time-weighted average of 8 hours under foreseeable conditions. As with all other Personal Protective Equipment (PPE), employers are required to provide appropriate respirators to employees when they are required to use them. Employees who use a respirator for 30 or more days a year are entitled to employer-provided medical surveil-

lance. There are also requirements for hazard communication, training and recordkeeping.

Shortly after OSHA announced the proposed rule back in 2013, a group of 11 national construction industry trade organizations announced the formation of the Construction Industry Safety Coalition in order to oppose the proposed rule. The coalition quickly grew to 25 organizations and includes the Associated Builders and Contractors (ABC), Associated General Contractors (AGC), American Road and Transportation Builders Association (ARTBA), International Council of Employers of Bricklayers and Allied Craftworkers (ICE) and the Mason Contractors Association of America (MCAA) among its membership.

In March 2015, the CISC found that OSHA may have underestimated the cost to implement the new rule. According to the CISC, the new rule will cost the construction industry \$4.9 billion per year. OSHA's initial estimates had the annual costs to implement the new rule at \$637 million annually. With the release of the final rule, OSHA now estimates it will cost about \$1.03 billion annually.

The final rule was expected to be published in the Federal Register on March 25th. The new rule will go into effect 90 days after being published. Compliance with all provisions of the new rule will begin one year after it goes into effect with the exception of certain requirements for laboratory analysis which will be two years after the rule goes into effect.

*Posted on March 24, 2016 by Kendall Jones in Construction News*

*For the asphalt and paving industry, the National Asphalt Pavement Association (NAPA) recognized that roadway milling operations have the potential to create silica-laden dust, and NAPA has worked for more than a decade with Industry to devise engineering solutions that would control these emissions.*

*Through its hard work, the Asphalt/Silica Milling Machine Partnership developed efficient solutions to this potential hazard. OSHA recognized the effectiveness of these engineering controls by specifying their use in Table 1 of the standard. Many newer existing milling machines already have these controls in place, and manufacturers have pledged to have them on all half-lane and larger mills starting in January 2017. In addition, retrofits will be made available for many older model milling machines.*

*NAPA has developed an interim guidance to provide an overview of the rule and identifies how OSHA-approved equipment controls can be used to comply with some aspects of the rule. For asphalt pavement road construction activities where OSHA has not identified specific controls, the guidance provides additional information that will assist companies with their compliance efforts.*

*A link to the NAPA interim Guidance is below:*

*<http://www.asphaltpavement.org/PDFs/EH&S/Silica-Rule-interim-guidance-20160404.pdf>*

*Walter Hungarter at RT Environmental Services, Inc. will be following this further and working with the Pennsylvania Asphalt Pavement Association Members as the Rule becomes effective.*

**FEDERAL REGISTER NOTICES**

<http://www.federalregister.gov>

- Notice - Recommended Aquatic Life Ambient Water Quality Criteria for Cadmium - 2016 *(Federal Register – 4/4/16)*
- Notice – Aquashade, Nithiazine, d-limonene, and 2H-Cyclopent(d)isothiazol-3(4H)-one, 5,6-dihydro-2-methyl-(MTI) Registration Review Interim Decisions; Notice of Availability *(Federal Register – 4-20-16)*
- Notice – 2-(Decylthio) Ethanamine Hydrochloride, Aliphatic Alcohols C1-C5, Bentazon, Propoxur, Propoxycarbazone-sodium, Sodium Acifluoren, Thidiazuron; Registration Review Proposed Interim Decisions; Notice of Availability *(Federal Register – 4/21/16)*
- Final Rule – Air Quality Plans; North Carolina; Infrastructure Requirements for the 2010 Sulfur Dioxide National Ambient Air Quality Standard *(Federal Register – 4/26/16)*
- Proposed Rule – Air Plan Approval and Air Quality Designation; TN; Redesignation of the Sullivan County Lead Nonattainment Area to Attainment *(Federal Register – 4/26/16)*

**PENNSYLVANIA BULLETIN NOTICES**

- 12/19/15 – Department of Environmental Protection published notice of Final Technical Guidance on the Use of Reclamation Fill at Active Noncoal Sites and notice of coal mining reclamation fees for 2016.
- 1/23/16 – The Fish and Boat Commission published notice of additions and revisions to the list of Wild Trout Streams and Class A Wild Trout Waters.
- 3/5/16 – Department of Environmental Protection published notice of no change in the 2016 anthracite and bituminous surface mine reclamation bond rate guidelines (page 1280) and notice of bonding rates for water supply replacement.
- 3/19/16 – Department of Environmental Protection published notice of final technical guidance on Permit Transfers for Coal and Noncoal Operators. Questions regarding this technical guidance document should be directed to Greg Greenfield, 717-787-3174 or send email to: [grgreenfie@pa.gov](mailto:grgreenfie@pa.gov).
- 3/26/16 – The Department of Environmental Protection published notice of extensions for general permits on the Beneficial Use of Biosolids by Land Applications (PAG-08), Beneficial Use of Exceptional Quality Biosolids by Land Application (PAG-07) and Beneficial Use of Residential Septage by Land Application (PAG-09).
- 4/9/16 – Department of Environmental Protection published notice of the reissuance of the NPDES General Permit for Stormwater Associated with Mining Activities (BMP GP-104).
- 4/23/16 – Department of Environmental Protection published notice it will not proceed with proposed modifications to the General Permit BWEW-GP-8 related to Temporary Road Crossings and the existing General Permit will remain in effect.

**SCOPE OF SERVICES**

**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

**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





**KEY HIGHLIGHTS**

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