

THE STANDARD

Volume XIV
February 2008 - Issue I

www.envstd.com

US EPA SmartWay Transport Partnership

In the United States, the majority of goods, products, and commodities are transported by rail or truck. These transportation modes, also known as ground freight, are a significant source of carbon dioxide (CO₂), nitrogen oxide (NO_x), and particulate matter emissions. In an effort to reduce emissions, the US EPA established the SmartWay Transport Partnership - a voluntary partnership between various freight industry sectors and the US EPA that establishes incentives for fuel efficiency improvements and greenhouse gas emissions reductions. By 2012, this initiative aims to reduce 33 - 66 million metric tons of CO₂ emissions and up to 200,000 tons of NO_x emissions per year. At the same time, the initiative will result in fuel savings of up to 150 million barrels of oil annually.

Carriers and shippers can become SmartWay Transport Partners by committing to improve their environmental performance and to integrate innovative cost-saving strategies into freight operations. Shippers must commit to shipping the majority of goods with SmartWay Transport Partner carriers. Partners achieving superior performance earn the opportunity to display the SmartWay Transport logo.

Annually, the US EPA recognizes Partners' special achievements that significantly reduce the environmental impacts of the freight sector. The SmartWay Excellence Awards honor organizations that integrate innovative strategies and technologies into their business operations, resulting in reduced energy consumption and green-

(Continued on page 2)



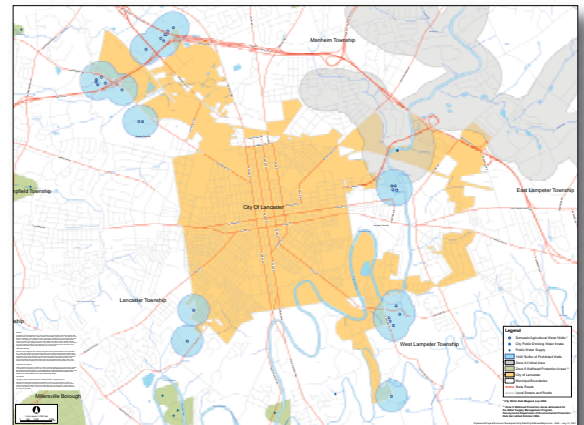
City of Lancaster Receives Area-Wide Non-Use Aquifer Designation

The City of Lancaster, Pennsylvania (City) recently received an area-wide Non-Use Aquifer Designation (NUAD) from the Pennsylvania Department of Environmental Protection (PA DEP) for eligible areas of the City. The NUAD establishes that groundwater underlying the City is not currently used or planned to be used for drinking water or agricultural purposes. Groundwater contamination from historical industrial activities within the City is well documented and the City anticipates that the official designation, which was approved on November 20, 2007, will encourage and facilitate remediation within the City.

Environmental Standards provided technical assistance to the City by conducting a hydrogeologic assessment and developing a shallow groundwater potentiometric surface map that were used in the application process. This work was conducted as part of Lancaster County's Brownfields Assessment Program through a grant from the United States Environmental Protection Agency.

Municipal entities may propose a geographic area as a non-use aquifer under Section § 250.303 of Pennsylvania's Land Recycling and Environmental Remediation Standards Act (Act 2). The City met the requirements of Section § 250.303 by completing the following four steps for the area proposed for NUAD.

1. Prohibit future groundwater use.
2. Verify that groundwater is not currently used.
3. Verify that no future groundwater use is planned.
4. Establish the geographic area of the NUAD.



City of Lancaster, Pennsylvania, Non-Use Aquifer Certification Area

The first step for the City in obtaining the area-wide NUAD was passing an ordinance prohibiting the use of groundwater for drinking or agricultural purposes. This ordinance was adopted by City Council on July 22, 2003. The ordinance required all private well users to connect to the City water system.

To accomplish step two, the City's staff conducted extensive research on existing

(Continued on page 2)

Featured Topics

- Split-Sample Analyses Disparity.....2
- Ivy Landfill Update.....3
- Employee News.....3
- Green Team Goats.....4
- Laboratory News.....4
- Spring Water Evaluation.....5
- SW-846 Final Update.....5
- Brownfield Redevelopment Project.....6
- Brownfield Program Lawsuit.....7
- Silicosis.....7

(Continued from page 1 - SmartWay)

house gas emissions. At the October 22, 2007, Council of Supply Chain Management Professionals' Annual Conference in Philadelphia, Pennsylvania, the US EPA announced the 34 winners of the 2007 SmartWay Excellence Awards. A partial listing of winners is presented below. For the complete list, please visit <http://www.epa.gov/smartway/awards07.htm>.



SmartWay Excellence Award recipients range from small businesses to Fortune 500 companies, but all have one thing in common - they are top performers in either their size or sector in reducing fuel use and lowering emissions. Is your Logistics Service Provider a top performer?

2007 SmartWay Excellence Award Winners

Freight Carriers

Contract Freighters (CFI)
CSX Transportation
John Christner Trucking
Knight Transportation
Langford
Meijer
Metropolitan Trucking
Orlicks
P.A.M. Transportation Services
Quad/Graphics
Roehl Transport
Schneider National
Smithfield Transportation Co.
Swift Transportation Co.
TransAm Trucking
Wal-Mart

Affiliates

American Trucking Association
Cascase Sierra Solutions
4 State Trucks
North Central Texas Council of Governments
Superior Financial Group

For information about the Logistics Auditing Services provided by Environmental Standards, please contact Quality Assurance Specialist Ruth L. Forman, CEAC, at 610.935.5577. ■

(Continued from page 1 - Lancaster NUAD)

wells using a Pennsylvania Groundwater Information System (GIS); this required re-searching all records to determine if there were any wells within the City or within a 1,000-foot buffer of the area surrounding the City. There is no state requirement to register private wells; consequently, this proved to be a very difficult task.

To verify that all potential wells were identified, the City cross-referenced water billing records with sanitary sewer accounts to determine what properties were not receiving water bills and used Lancaster County's GIS to "map out" all the wells being used within City limits.

In addition to the methods described above, the City interviewed staffs from adjacent municipalities to identify known water wells near the NUAD area. Two wells that were actively being used on Dillerville Road within the City were identified. The City had the cooperation of the property owners to extend the water main to connect them to the city system and they abandoned their well water use. In addition, 27 wells used for drinking water or agricultural purposes were identified within 1,000 feet of the municipal boundary of the City. As a precaution, a 1,000-foot protective buffer that is not included in the NUAD area was established around these wells.

Step three was accomplished by verifying that at the time of the application there were no current planned future uses of groundwater within the NUAD area.

The final step in the process was completed by establishing the NUAD area that

is shown in the figure on page 1. With help from Lancaster County's GIS Department, the City finalized the maps needed for the application submittal to PA DEP. After satisfying all of the requirements, the Area Wide NUAD was granted to the City on November, 20, 2007 - almost 4 years after the process was initiated.

The NUAD certification will continue to expedite brownfields redevelopment projects that are currently underway or are being planned within the City's limits by eliminating the need for individual remediators to obtain pre-approval of the non-use aquifer designation for their specific site. Remediators are still required to demonstrate compliance with the statewide health standards for non-use aquifers, although they can apply these standards without "reinventing the wheel" by demonstrating that their site meets the requirement of a non-use aquifer.

The City of Altoona, Pennsylvania, received a similar designation in 2004 for a specific area - Lancaster and Altoona are the only two area-wide NUADs in Pennsylvania. ■

Environment Ranked #1 Issue

The Journal of Commerce published its 16th Annual Review & Outlook in January 2008. More than 200 transportation and logistics executives contributed to the report, which is considered a "barometer" of the industry. Surprisingly, these executives view the environment as the #1 issue the industry must address in 2008. The transportation and logistics industry can now add minimizing impacts to the environment to the list of organizational challenges. ■

Split-Sample Analyses For BOD Compliance Yield Significant Disparity In Results

A major industrial client recently called upon Environmental Standards to investigate an analytical data problem associated with split-sample analytical disparity. The client is required to monitor its effluent for biochemical oxygen demand (BOD) and metals as part of its discharge monitoring program; the client uses a commercial environmental laboratory to perform the required analyses. The county authority responsible for monitoring the industry effluent occasionally collects a split sample for testing by a different commercial laboratory serving as the county's "QC" laboratory.

During several sampling events, the industry BOD data exceeded the client's discharge permit limit, and there was poor comparability with the county QC laboratory during much of this time - up to an *order of magnitude* difference. It could not be easily determined which laboratory's data were correct or how to make the method performance reliable and comparable. The corrective action work plan developed by Environmental Standards included audits of the sampling techniques and analytical methods at both laboratories, audit reports with recommendations of minimum technical requirements for performance of the BOD analysis, and a follow-up PT study that included a variety of samples to verify comparability and reliability of the reported test data.

Ivy Landfill Update

During June and July 2007, Environmental Standards completed construction of the injection system for implementation of the Full Scale Engineered Enhanced Bioremediation (EBR) program at the Ivy Material Utilization Center (Ivy MUC, or Ivy Landfill) located near Charlottesville, Virginia. The purpose of the EBR program is to remediate site groundwater that has been impacted with a variety of volatile organic compounds (primarily chlorinated ethenes). A pilot scale test of the technology was successfully completed at the site in late 2006.

Injection of the remedial substrate began in October 2007. Performance monitoring of the full-scale EBR implementation consists of monthly analysis of groundwater samples from site wells. A review of the data from the three currently available rounds of analytical data has shown some tantalizing signs of active remediation of the groundwater, but more data will be required to form a definitive opinion.

The soil vapor extraction (SVE) system constructed in 2006 became fully operational in mid-2007. Since that time, the system has been pulling vapor-phase solvents from an historic liquid waste disposal area at the landfill to remove potential



source material and augment the full-scale EBR groundwater remediation program. To date, the system has removed approximately 2,000 pounds of solvent from the subsurface. Additionally, the system was modified to greatly reduce the amount of supplemental propane that was necessary to maintain thermal destruction criteria.

In 2006, two of the existing landfill cells were found to have excessively high liquid levels, which in turn were adversely impacting the collection efficiency of the landfill gas collection system. Following extensive monitoring and testing, a plan was developed to reduce the liquid levels by installing a series

of horizontal drains to allow the accumulated liquids to gravity drain from the cells. This effort is currently awaiting finalization of the permitting process with the Virginia Department of Environmental Quality (VA DEQ), which is expected to be completed in April 2008. Installation of the horizontal drains is expected to occur during June and July 2008. According to Phil McKa-lips, P.G., of the Environmental Standards Charlottesville office, "I believe that this is the first time that this technology has been used for this purpose at a municipal landfill in the Commonwealth." ■

Employee News

American Institute of Chemists Elects Officers

Technical Director of Chemistry Rock J. Vitale, CEAC, CPC, was recently elected as Secretary of the American Institute of Chemists (AIC).

Logistics Auditor Completes Responsible Care Lead Auditor Training

Manager of Logistics Services Lisa D. Quiveors has successfully completed RC14001®/RCMS® Lead Auditor Training. Responsible Care is a global initiative by the chemical industry to improve the Environmental, Health, and Safety (EH&S) performance of the chemical industry by promoting the safe and secure management of chemical products and processes.

Future Scientist

Manager of Risk Assessment and Toxicology Kathy Zvarick has been especially busy the last few months. She and her husband Felix welcomed their first child, Quinn Kathleen, on October 24, 2007. Quinn weighed 8 pounds and measured 20 inches at birth. Kathy has returned to work and is very excited about juggling her very busy career with her new responsibilities as a mom. ■

Policy Manuals: Making Sure Everyone Is On The Same Page

Environmental analysis is a complex process that frequently requires interaction of personnel from multiple organizations and diverse backgrounds. From initial site planning and field sampling to laboratory analysis and data interpretation and use, clear guidelines regarding a company's expectations are necessary to ensure that consistent, high-quality, defensible data are generated and used properly. Whether environmental analyses are managed in-house or by one or more consultants, communication of company policy is an important consideration.

One effective method of documenting and communicating company policy is through preparation of an Environmental Policy Manual. A policy manual is a single cohesive document detailing the administrative and operational aspects of a department or group. An Environmental Policy Manual includes all applicable standard operating procedures, technical reference and guidance documents, and administrative information relative to environmental investigations and analyses. Depending
(Continued on page 7)



Founder and CEO Rock J. Vitale was recently profiled in the *Philadelphia Business Journal's* CEO section. Due to this honor, he was invited to the *Journal's* CEO Files Event at the Wachovia Center in January. Pictured at left is Rock holding his prized hockey stick signed by Philadelphia Flyer's defenseman, Kimmo Timonen.

Green Team Goats

As our clients know, Environmental Standards strives to keep abreast of advancements in technology in order to apply them as solutions to our client's business problems. The strategy recently employed by one of our clients, however, had nothing to do with advanced technology and everything to do with ingenuity.

Glimcher Realty Trust (www.glimcher.com) is an industry leader in the ownership, management, acquisition, and development of regional and super-regional malls. Glimcher owns and/or manages a total of 28 properties in 14 states aggregating approximately 23,446,209 square feet of gross leasable area. Of the 28 properties, 24 are enclosed regional or super-regional malls that are located in the country's top-growing metropolitan statistical areas. Consistent with the company's focused efforts to promote energy-efficient and environmentally friendly property management initiatives, the Glimcher Team at a 943,000-square foot mall project in Auburn, Washington, recently employed the "services" of 100 goats.

The goats, which are known to eat just about anything and to do it quickly, were used to clear a sizable area (several acres) of grass surrounding an overgrown retention pond at the site. In lieu of approximately \$40,000 for landscapers, chemicals, and gas-powered equipment, the "goat fee" was \$3,000.

At Environmental Standards, we pride ourselves in the application of new and emerging technologies, but as one of our clients

demonstrated to all of us – simple solutions to modern property management issues may not be obvious, but they can be cost-effective and elegant in their own way. ■



Bruce Goldsberry, General Manager of the Auburn, Washington, SuperMall with his new "employees."

Laboratory News

Pace Analytical Services, Inc.

Purchases Northwest Laboratory
Pace Analytical Services, Inc. (Pace) announced its purchase of the assets of Laucks Testing Laboratory, Inc. in Seattle, Washington, effective February 19, 2008. Pace is a privately held, full-service sampling and analytical testing firm that operates a nationwide network of eleven laboratories and nine service centers. The addition of this northwest facility represents a significant geographic expansion for Pace, which is the second largest environmental testing laboratory company in the United States.

Accutest Corporation Acquires California Laboratory

On February 1, 2008, Accutest Corporation announced the acquisition of Entech Analytical Labs, Inc. in Santa Clara, California. The Entech facility is a full-service environmental testing laboratory in the Silicon Valley. Accutest Corporation is currently the third largest operator of environmental testing laboratories in the United States.

Are Your Laboratory Invoices Correct?

Environmental Standards has assisted our clients by reviewing their invoices for laboratory services for more than a decade. As part of the review process, Environmental Standards checks the invoices against the client-specific contract pricing, the associated Chain-of-Custody, and the data deliverable to ensure that the correct unit costs and number of samples have been invoiced. One might think in this day and age of accounting and automation that correct invoices would be generated by environmental laboratories close to 100% of the time; however, based on Environmental Standards' experience, this is not the case.

The preparation of a laboratory invoice still requires human intervention and data input to select the correct number of samples, the correct method, and the correct contract pricing. In addition, the analytical costs in some of our clients' laboratory contracts are "fully loaded" costs to include all supplies and preparation fees; many times, this contract provision is overlooked in the preparation of the invoice. It has been Environmental Standards' experience that there is about a 15% error rate in the invoices that we have reviewed. Errors have been identified that included incorrect selection of the analytical method and

number of samples analyzed; charges for bottleware, SW-846 Method 5035 kits, and other supplies that were included in the unit charges for the project; charges for QC samples that were included in the unit charges for the project; and incorrect contract pricing.

Recently, one of Environmental Standards' clients accepted a several-month challenge regarding the review of invoices. The challenge was that the labor cost for Environmental Standards to review the client's invoices would be more than offset by the savings from the overcharges in incorrect invoices generated by their laboratories. During a three-month period of time, Environmental Standards reviewed over 1400 laboratory invoices and identified approximately 70 invoices containing unit cost discrepancies, prohibited charges, and missed turn-around times. The client received an average 13% refund for the invoices for which discrepancies were identified, which was more than adequate to fund the labor cost to review the invoices. If you have concerns with your laboratory invoices, contact Quality Assurance Specialist Ruth Forman at 610-935-5577 to see if Environmental Standards' invoice review services can help you. ■

Spring Water Evaluation Facilitates Construction Project

Environmental Standards was recently contacted by a pharmaceutical client to evaluate a spring that was encountered during construction activities at its existing facility in southeastern Pennsylvania. During the installation of elevator piston shafts, which extended to a depth of 60 feet below the ground surface, a saturated bedrock fracture was encountered that resulted in artesian spring conditions at the ground surface.



The goal of the requested evaluation was three-fold. The first goal was to determine if local regulatory agencies needed to be notified regarding the discharge of groundwater. The second goal was to evaluate the impact of the quality of water being discharged to the existing storm water management system and to determine if the existing discharge permit would need to be modified. The third goal was to help the client evaluate potential dewatering and water management plans for both the short term (during construction) and long term.

Environmental Standards geoscientists performed an initial site visit to calculate the flow rate from the spring and to evaluate the spring water management system in place. Initial calculations indicated that the spring was flowing between 21 and 25 gallons per minute, which equated to a daily flow between 30,000 and 36,000 gallons and a monthly flow of approximately 1,000,000 gallons. The water was being discharged into a storm water pipe that drained to the on-site storm water retention pond, which, in turn, discharged to surface water.

The site is located in the Delaware River Basin. Environmental Standards geoscientists informed the client that the site was in the Groundwater Protection Area of the Delaware River Basin and that groundwater withdrawals were governed by the Delaware River Basin Commission (DRBC). In addition, the client was advised that a permit would likely be required because the flow exceeded an average daily withdrawal of 10,000 gallons per day for a 30-day period, the criterion specified by the DRBC. Environmental Standards completed an Application for a Ground-

water Withdrawal Project in the Delaware River Basin on behalf of the client.

The quality of the spring discharge was evaluated relative to the current facility storm water permit. The spring water quality was evaluated based on Pennsylvania Department of Environmental Protection (PA DEP) Specific Water Quality Criteria (SWQC), National Pollutant Discharge Elimination System (NPDES) guidelines, and PA

DEP wastewater guidelines. Spring water quality met the criteria in these guidelines for the tested parameters with the exception of chloride, which was slightly above the criteria. Environmental Standards geoscientists, however, determined that dilution would reduce the chloride concentration to acceptable levels as the spring water mixed with other sources of water in two storm water retention ponds prior to discharge to an intermittent stream.

An evaluation of long-term remedies to manage or abate the spring flow indicated that sealing the bedrock fracture or stopping the migration of the water along the casing of the piston shafts was the preferable solution as opposed to long-term management of the water discharge. Stopping the flow at the source would alleviate unnecessary depletion of the groundwater and prevent water management issues underneath the building addition, as well as eliminate the need for long-term groundwater withdrawal permitting. The general contractor for the construction coordinated the injection of a non-toxic, inert polymer in the area around the elevator piston shafts in an effort to stop the spring discharge. The deep injection process injects a high-density, inert polymer that expands 20-times its original volume. The injection process reduced the water flow to 0.125 gallon per minute, or 180 gallons per day, which was well below the permitting requirements of the DRBC. The spring flow was monitored for four consecutive weeks following the injection process and the flow remained consistent at 0.125 gallon per minute. The DRBC reviewed the post-injection flow data and determined that an application for groundwater withdrawal was not necessary. ■

Final Update IV To SW-846 Available

The US EPA announced the availability of "Final Update IV" to the Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846) in the *Federal Register* on January 3, 2008. Final Update IV contains new and revised analytical methods that may be used in monitoring or complying with Resource Conservation and Recovery Act (RCRA) hazardous waste regulations.

The US EPA historically has proposed and finalized updates to SW-846 as part of a rulemaking. On June 14, 2005, however, a final rule, referred to as the Methods Innovation Rule (MIR), removed any requirement to use an analytical method in SW-846, unless that method is the only one capable of measuring a method-defined parameter from the RCRA hazardous waste regulations. The MIR allows the Agency to issue final updates to SW-846 as *guidance*, provided the analytical methods contained in the update are not required by the RCRA hazardous waste regulations. Update IV contains new and revised analytical methods that may be used for RCRA projects. The specifics of Update IV are available at www.epa.gov/SW-846. ■

Unitil Corporation To Purchase Two New England Firms From NiSource, Inc.

Unitil Corporation (Unitil) and NiSource Inc. (NiSource) announced on February 19, 2008, that Unitil has agreed to purchase Northern Utilities, Inc. (natural gas distribution utility) and Granite State Gas Transmission, Inc. (natural gas transportation company) from NiSource. The transaction is subject to approval by the Maine Public Utilities Commission and the New Hampshire Public Utilities Commission and review by certain federal agencies. Unitil is a public utility holding company whose utility subsidiaries provide electric service in New Hampshire and electric and gas service in Massachusetts.

Ambitious Brownfield Site Redevelopment Project

Environmental Standards is assisting the Percheron Group (www.percherongroup.com) with the redevelopment of a 70-acre property in Downingtown Borough in Central Chester County, Pennsylvania. The tentatively named "River Station Project" will use "smart growth" principles to transform a former blighted industrial site into a functional, sustainable community. Downingtown, which is located 33 miles west of Philadelphia, has a population of approximately 8,000 and an impressive historic legacy.



The industrial buildings at the former industrial site were reportedly constructed in the late 1860s and were used until 2005 for paper manufacturing purposes. Various remedial concepts and strategies are currently being considered based on the proposed and anticipated future land uses. In general, one or a combination of cleanup standards provided for under Pennsylvania's Industrial Site Redevelopment Law (Act 2) will be used to address environmental conditions at the site. In the areas of the site that will be used for residential purposes, remedial strategies will be used to achieve a residential standard under Act 2; residential standards under Act 2 may also be used in the portions of the Site that will be used for non-residential purposes. The Percheron Group intends to maximize the use of the residential statewide health standard under Act 2 to address conditions at the site provided that such a strategy is practicable, cost effective, and feasible. The developers, however, recognize that additional remediation of portions of the site may be required because of non-residential use or a change in the exposure patterns on which the remediation is based.

Five primary redevelopment concepts are currently planned:

- Condominiums (mid-density neighborhood)
- Retail Mixed-Use
- Townhouse Neighborhoods
- Live-Work Units
- Light Industrial Use

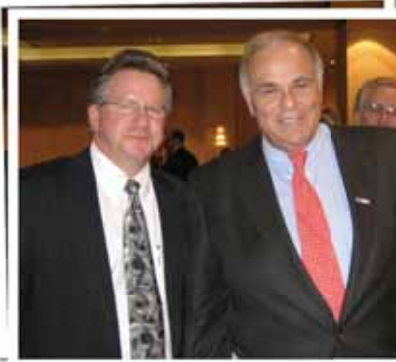
A mid-density neighborhood will provide a compact array of condominiums adjacent to a planned village center and near a

proposed transit stop. A retail mixed-use area will create a non-residential area that provides a mixture of retail, commercial, and civic uses in the western portion of the site. Townhouse neighborhoods will provide an efficient settlement of townhouses in a residential neighborhood environment, accessible by alleys, where possible, and complemented by a limited number of compatible

civic and residential uses. Live-work units will provide ground floor retail or professional office space with residential units conveniently located directly above. A small light industrial use area will consist exclusively of commercial property used as light industrial/flex space. In addition, large portions of the site will be preserved as undeveloped green space and certain existing historical buildings and structures will be retained for adaptive reuse.

The environmental cleanup measures and remedies will ultimately be determined by final use approvals by the Borough of Downingtown and adjacent East Caln Township. Once completed, River Station will undoubtedly change what people think of when they speak of this historic borough. ■

Principal Geoscientist Gerry Kirkpatrick was a panelist at the recent ICSC/EPA Northeast Brownfields Forum in Philadelphia, Pennsylvania on February 12, 2008. The Honorable Edward G. Rendell, Governor of Pennsylvania, was the guest speaker. The Governor spoke to attendees about the importance of redeveloping brownfields.



Gerry Kirkpatrick and Governor Rendell

Interpreting Clean Water Act Analytical Method Flexibility

The Methods Update Rule (40 CFR Part 136), which became effective on April 11, 2007, includes a provision that allows laboratories to modify approved reference methods without formal US EPA review and approval. In an effort to clarify some of the confusion about interpreting Part 136 method flexibility, Chief Richard Reding of the Water Engineering & Analytical Support Branch of the US EPA Office of Science and Technology issued a memorandum to Quality Assurance Managers, Alternate Test Procedure Coordinators, and NPDES Coordinators on November 20, 2007.

The memorandum, which encouraged regulators to allow method flexibility in the spirit of method improvement, presented examples of allowed method modification and addressed method modification evaluation, including both developer and user responsibilities to document modifications. Mr. Reding indicated that the information provided in the memorandum could be used when auditing a laboratory or fielding questions about method modifications. He stressed that the guidance in the memorandum represented "current thinking" and that guidance would be updated based on experience with the new method flexibility.

Additional information about this developing issue is available at <http://www.epa.gov/waterscience/methods>. Please contact Technical Director Chemistry Rock J. Vitale, CEAC, CPC, at 610-935-5577 if you have questions about the impact of method flexibility on current projects. ■

Pennsylvania HSCA Program Funding Update

In December 2007, Pennsylvania Governor Edward G. Rendell prevented the layoff of hundreds of important state positions and extended the life of the state's Hazardous Sites Cleanup Fund (often referred to as HSCA [Hazardous Sites Cleanup Act]) by signing Senate Bill 1100 into law. SB 1100 will transfer \$17 million to the Hazardous Site Cleanup Fund from legislative accounts for the current fiscal year, which ends on June 30, 2008. For fiscal years 2008-09 through 2010-2011, the bill allocates \$40 million each year in existing revenues from the Capital Stock and Franchise Tax, which will expire on December 31, 2010.

For more information, please contact Principal Geoscientist Gerry Kirkpatrick at 610-935-5577. ■

New York State Brownfield Cleanup Program in Dispute

The New York State Brownfield Cleanup Program, intended to encourage the cleanup and redevelopment of thousands of contaminated sites throughout the state, is in the courts. The public interest law firm "Earthjustice" is claiming that the New York State Department of Environmental Conservation (NYS DEC) implemented regulations "...failing to protect public health and the environment, ignoring the directives set forth by the State Legislature when it approved the program in 2003." Among other issues, Earthjustice contends that NYS DEC adopted weaker cleanup standards for properties in polluted neighborhoods (particularly when a remediator used "background" standards) and arbitrarily excluded properties polluted by an off-site source from the program.

"Enacting weaker standards for communities burdened by polluting industries is not only unfair, it's illegal," said Earthjustice attorney Keri Powell. "Under these rules, low income neighborhoods struggling with a legacy of contamination would not receive the same level of protection as other communities.

"Under Governor Pataki's administration, New York established unsafe, second-rate soil cleanup standards that are not protective of children and drinking water," said Anne Rabe, Board member of Citizens' Environmental Coalition. "Surprisingly, Governor Spitzer and the Departments of Environmental Conservation and Health have refused to address this outstanding flaw in the brownfield program. It is time for the state to fix this problem and stop subsidizing dirty cleanups."

In March 2007, Earthjustice filed a lawsuit against the state to challenge the weak regulations on behalf of the Sierra Club, the New York Public Interest Research Group, Environmental Advocates of New York, and the Citizens' Environmental Coalition. Oral arguments were heard by a state Supreme Court judge on December 21, 2007; as of the publication of this article, the judge has not issued a ruling.

The opinion in the case will be important because many Environmental Standards' clients rely on "background" standards as the selected standard for cleanup. One aspect of the background standard under attack in the case is that a property owner may not be responsible for contamination at his/her property when the contamination

has been created by others. The removal of the "background" standard provision from brownfields cleanup standards will remove key protections for clients and will adversely affect costs associated with property redevelopment, in some cases, discouraging redevelopment at all.

Look for updates in *The Standard* as the case progresses. For a copy of the complaint, contact Marketing Coordinator Abby Wilson at awilson@envstd.com. ■

Silicosis



Asbestosis gets all the "good press." Silicosis, however, has some aspects that are very similar to asbestosis

and both conditions involve the lungs. Silicosis generally develops in two ways - chronic and acute. Acute silicosis is the result of the inhalation of a large volume of silica crystals over a short period of time. Chronic silicosis develops a result of a build up of silica crystals in the lungs over many exposures.

Silica crystals, like asbestos fibers, cause a reaction from lung tissue in the form of inflammation and irritation. When lung tissues are repeatedly exposed to silica crystals, fibrosis (thickening and scarring) can result. Some symptoms of silicosis include chronic dry cough, shortness of breath with exercise, trouble sleeping, chest pain, and nails with a bluish tint. As silicosis is a debilitating disease, it is recommended that employees who are routinely exposed to crystalline silica and display some of these symptoms seek medical assistance.

Silicosis is generally a work risk factor. The US Department of Labor Occupational Safety & Health Administration (OSHA) has set a permissible exposure level (PEL) for silica dust (crystalline silica). The PEL has been set to reduce the risk of ill effects due to exposure but does not completely remove the risk. Workers can be exposed to crystalline silica by working directly with material containing silica or by working near other workers who are working with the material. Some of the occupations associated with exposure to crystalline silica include workers involved in construction/demolition work, drilling, manufacture of

concrete products, manufacture of soaps and detergents, foundry, and stone cutting. Granite, marble, sand, quartz, sandstone, concrete products, asphalt, and many abrasives are known to contain silica.

Exposure to crystalline silica and, therefore, the risk of silicosis can be handled with preventive measures such as enclosing areas where silica containing dust will be generated, wearing properly fitting personnel protection equipment, using water or wet vacuums to clean up dust, washing hands/face before eating/drinking, and wearing removable washable or disposable coveralls. It is recommended that employees working with crystalline silica dust do not smoke. ■

(Continued from page 3 - Policy Manuals)

on company needs, a manual may include organizational charts, key personnel contact information, administrative policy documents, technical reference materials, decision trees, regulatory guidance, field standard operating procedures, laboratory technical requirements, and data reporting requirements. A manual may include copies of these documents or may specify the location of the documents (e.g., links to Intranet sites). The collection of all policy documents in a single location ensures that employees and contractors have ready access to important and correct information.

Whether distributed in hardcopy or electronic form, an Environmental Policy Manual serves several important functions. First, the development and distribution of an Environmental Policy Manual standardizes procedures to ensure that employees and contractors are consistently performing tasks in accordance with company expectations, applicable regulations, and best practices. An environmental policy manual serves as a technical reference point for employees and contractors performing work on company sites. In addition, the document serves as an effective training tool and provides a benchmark against which employee or contractor practices may be audited. The collection of all applicable policies and procedures in a single location enables and encourages consistent review and revision of these documents based on new technology or methodology. Finally, policy manuals frequently include decision trees for non-routine occurrences to ensure that such events are consistently handled in accordance with company policy and any applicable regulations. ■

E: solutions@envstd.com | W: www.envstd.com

P: 434.293.4039 | F: 434.293.2715
Charlottesville, VA 22902
1218 East Market Street, Suite 100
Charlottesville Office

P: 610.935.5577 | F: 610.935.5583
Valley Forge, PA 19482
P.O. Box 810
1140 Valley Forge Road
Corporate Headquarters

Setting the Standards for Innovative Environmental Solutions

ENVIRONMENTAL
STANDARDS



THE STANDARD



Environmental Standards completed
its 1000th laboratory audit in 2007!
It is not too late to submit your
nominations for 2008 audits.

Do you want to help us save some **trees**? To receive a copy of *The Standard* in your e-mail inbox, simply e-mail Marketing Coordinator Abby Wilson, awilson@envstd.com, and you'll be added to our e-newsletter distribution list. Please reference "E-newsletter" in the subject.