THE STANDARD

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# Relative Potency Factor Approach For Polycyclic Aromatic Hydrocarbon Mixtures

The US Environmental Protection Agency's (US EPA's) Integrated Risk Information System (IRIS) Program has released a relative potency factor (RPF) approach document to assess cancer risk from exposure to polycyclic aromatic hydrocarbon (PAH) mixtures (one approach) for scientific review. The published draft document is not a reassessment of individual PAH carcinogenicity, but rather, a cancer risk estimate for PAH mixtures determined by summing doses of component PAHs after scaling the doses (with RPFs) relative to the potency of an index PAH such as benzo[a]pyrene. The cancer risk is then estimated using the dose-response curve for the index PAH. RPFs for seven individual PAHs were developed in the US EPA Provisional Guidance for Quantitative Risk Assessment of PAHs (Provisional Guidance, 1993) and are utilized extensively within US EPA program offices and other regulatory agencies. The Provisional Guidance, however, does not reflect the most recent research, nor does it consider additional PAHs with carcinogenic potential (such as fjord-region PAHs).

Environmental Standards has reviewed the RPF document and has many concerns - most specifically regarding the precision and accuracy of the data used. US EPA has made no attempt to validate the chemical data used as the basis of its study and the data are invariably of inherent questionable quality. Data from historical studies dating to as far back as 1959 have been reviewed for the study; the apparent requirement for inclusion, based on US EPA's own report, is that the information was not judiciously screened relative to analytical data quality.

*Geoscientists install a groundwater monitoring well at an unpermitted landfill containing a large volume of crushed asphalt (a common source of PAHs).*

*The Supplemental Guidance for Conducting Health Risk Assessment of Chemical Mixtures* (US EPA, 2000) emphasizes that approaches based on whole mixtures are preferred to component approaches, such as the RPF approach. Risk assessment based on toxicity evaluations of whole mixtures inherently address specific interactions among PAHs and account for the toxicity of unidentified components of PAH mixtures. These approaches do not require assumptions regarding the toxicity of individual components (*e.g.*, dose or response additivity).
US EPA noted in its announcement that although whole-mixture assessment

*(Continued on Page 2, see "PAH")*

ENVIRONMENTAL STANDARDS™

# Environmental Standards Opens New Office In Kingston, Tennessee

Environmental Standards, Inc. is pleased to announce the company's expansion and the opening of our newest office in Kingston, Tennessee. The Tennessee office, which opened its doors on April 1, 2010, acts as a cornerstone for Environmental Standards' projects throughout the southeast United States. The office was initially founded to cost-effectively service an important regional client. The Tennessee office is currently managed by Senior Technical Chemist David I. Thal and will maintain a staff of experienced chemistry, geology, and information technologies professionals.

The new office is located at 1013 Brentwood Way, Kingston, TN 37763 and can be reached at 865.376.7590. ■

## Office Locations And Contact Information

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*(PAH, Continued from Page 1)*

is preferred, there are associated challenges. Very limited toxicity data are available for whole PAH mixtures and, in most cases, chemical analyses of the composition of mixtures are limited. In addition, PAH-containing mixtures tend to be very complex; the composition of these mixtures appears to vary across sources releasing these mixtures to the environment and in different environmental media in which the mixtures occur. For these reasons, a whole-mixture approach may not always be practicable for risk assessment purposes.

There is a large PAH database on carcinogenicity in animal bioassays, genotoxicity in various test systems, and bioactivation to tumorigenic and/or genotoxic metabolic intermediates. The RPF analysis presented in the draft document includes only unsubstituted PAHs with three or more fused aromatic rings containing only carbon and hydrogen atoms - these are the most widely studied members of the PAH chemical class. A database of primary literature relevant to the RPF approach for PAHs was developed by performing a comprehensive review of the scientific literature dating from the 1950s through 2009 on the carcinogenicity and genotoxicity of PAHs. The search identified over 900 individual publications for a target list of 74 PAHs that have been identified in environmental media or for which toxicological data are available. These publications identified more than 600 papers that included carcinogenicity or cancer-related endpoint data on at least one PAH and benzo[a]pyrene tested at the same time.

US EPA notes in the draft report that studies were included in the analysis if the following selection criteria were met:

- Benzo[a]pyrene was tested simultaneously with another PAH.
- A statistically increased incidence of tumors was observed with benzo[a]pyrene administration, compared with control incidence.
- Benzo[a]pyrene produced a statistically significant change in a cancer-related endpoint finding.
- Quantitative results were presented.
- The carcinogenic response observed in either the benzo[a]pyrene- or other PAH-treated animals at the lowest dose level was not saturated (*i.e.*, tumor incidence at the lowest dose was < 90%), with the exception of tumor multiplicity findings.
- There were no study quality concerns or potential confounding factors that precluded use (*e.g.*, no concurrent control, different and co-carcinogenic vehicles used, strains used for the tested PAH and benzo[a]pyrene; use of PAHs of questionable purity; unexplained mortality in treated or control animals).

Environmental Standards observes that no specific study screening relative to analytical data reliability was undertaken as part of this reassessment. In fact, only a cursory treatment of such laboratory data quality issues is provided at all. Even in the uncertainty analysis of the document, there is only limited discussion of analytical detection limits, laboratory testing methodologies, reporting limits, and other critical components upon which US EPA relied.

The new draft document represents a major revision to the manner in which PAH toxicity is evaluated at hazardous waste sites and introduces analytical obstacles. In many instances, commercial environmental analytical laboratories do not currently have the standards necessary to analyze qualitatively and quantitatively for the listed PAHs. In addition, most laboratories do not have the precision, accuracy, and sensitivity required to analyze for many of the listed PAHs to make the proposed RPFs realistic for implementation at this point in time. Furthermore, in more than a dozen cases, there are no reliable published methods for the analysis of the individual PAHs for which US EPA has proposed regulation.

If you would like a copy of the proposed draft document, please contact Environmental Standards. ■

# Environmental Standards Invited To Join API

The American Petroleum Institute (API) is the US oil and natural gas industry's primary trade association. The API develops and supports policies, standards, and collaborative programs to help the US oil and natural gas industry meet the energy needs of consumers in an efficient, environmentally responsible manner. Environmental Standards is proud that the membership committee has extended an invitation, and we are very happy to announce that we are joining the API.

A key function of the API is to provide federal and state legislative and regulatory advocacy that is based on scientific research; we look forward to this opportunity to further advance our understanding of the industry's scientific needs. The institute also develops measurement and operational standards for its member-practitioners. The more we can contribute to (and track) the development of these standards, the better we can serve the industry.

Membership in the API is by no means a given for anyone willing to join. Environmental Standards' value to the industry in very specific terms was recognized by API's leadership to gain the invitation. Membership promises to afford us the opportunity to work in support of the US oil and natural gas industry. Environmental Standards will have access to API's well-respected research capabilities and will be able to contribute to the industry's reputation through participation in widely recognized standards development and certification programs. We will also have access to API conferences, symposia, and training programs where our clients can further benefit from the experiences of our industry professionals. Other benefits include access to the members-only annual meeting, increased access to API publications and training, and leadership opportunities on API standards committees.

We look forward to sharing these special opportunities and insights with our clients, colleagues, and associates. ■

# Brownfields Program Produces Widespread Economic And Environmental Benefits

Environmental Standards has a long tradition of assisting developers and communities with brownfields redevelopment programs. Even now, in the current economic downturn, Environmental Standards is acting as the prime environmental consultant on several brownfields redevelopment projects. These projects, valued at more than $300 million (and future tax revenues to host communities projected to be in the billions of dollars), continue to provide a key source of project work for the firm.

According to the latest studies, US EPA's Brownfields Program alone (*excluding* economic development authority and local, county, and state initiatives) empowers states, communities, and other stakeholders to work together to prevent, assess, safely clean up, and sustainably reuse brownfields. Revitalizing brownfield sites creates benefits at a site and throughout the community.

Based on data from US EPA grantee reporting and through the program's ACRES database, through fiscal year 2008, on average, *$18.68 has been leveraged for each US EPA Brownfields dollar expended* at a brownfield from Assessment, Cleanup, and Revolving Loan Fund cooperative agreements since program inception.

US EPA's data also indicate that through fiscal year 2008, on average, 7.75 jobs have been leveraged per $100,000 of US EPA Brownfields funding expended on Assessment, Cleanup and Revolving Loan Fund cooperative agreements, also since program inception. As of January 2010, 61,023 jobs have reportedly been leveraged through the Brownfields Program.

*The Phoenixville Foundry in Phoenixville, Pennsylvania, is a redeveloped brownfield site that is now a special event space.*

The US EPA Brownfields Program has conducted five pilot studies, all of which concluded that redeveloped brownfield sites tend to have greater location efficiency than alternative development scenarios at greenfield sites; location efficiency has resulted in a 33% to 58% reduction in associated vehicle miles traveled and a reduction in air pollution emissions, including greenhouse gases. These same site comparisons show an estimated 44% to 88% reduction in storm water runoff. The US EPA studies suggest a range of positive impacts due to regional variation in development and travel patterns.

The US EPA Brownfields Program has also funded a study to assess the impact, or economic benefit, of Brownfields grants on residential property values. The study concluded that residential property values increased between 2% and 3% when a nearby brownfield was assessed or cleaned up. The study further concluded that cleaning up a brownfield can increase overall property values within a one-mile radius by $0.5 to $1.5 million. Additionally, initial anecdotal surveys indicate a reduction in crime in recently revitalized brownfield areas.

As is apparent from the numbers, there is a huge demand for site assessment work. The US EPA Program can expand upon recent policy clarifications to use site assessment dollars for environmental site assessments in conjunction with efforts to promote area-wide planning among areas and corridors of brownfield sites. The use of funds for these purposes enables the identification of infrastructure capacity along with potential end uses and is particularly important for economically distressed areas. Also, in certain instances when environmental site assessments reveal immediate threats to the environment or human health, a more programmatic use of US EPA funds to address these threats could be implemented. ■

## Environmental Sample Shipment Requirements

The American Council of Independent Laboratories (ACIL), whose members comprise 85% of the commercial environmental testing capacity in the United States, petitioned the US Department of Transportation (US DOT) in January 2010 to amend or provide "technical correction" to its Hazardous Material Regulations. Specifically, ACIL questioned the regulations associated with the commercial air shipment of environmental samples.

ACIL contends that the environmental industry is unable to comply with the requirements of Part 173.4 of the Code of Federal Regulations (CFR), which became effective on January 14, 2009. According to the ACIL petition, compliance with the "drop test" presents an economic hardship for the community as a whole and for small businesses and government-affiliated facilities in particular. The Council also cites an over 40-year history of transporting environmental samples by air without incident.

Environmental Standards will continue to closely monitor this important sample transportation issue. ■

# The Art Of Reading A Laboratory Report - Can You Pass The Test?

With school days coming to a close for our children and teachers cramming in exams before summer fever is in full effect, it seems like a good time for us at Environmental Standards to give a test of our own. Last November, at the Railroad Environmental Conference (RREC) in Champaign, Illinois, Quality Assurance Specialist/Principal Ruth L. Forman, CEAC, presented "The Art of Reading a Laboratory Report - Can You Pass the Test" to a room full of environmental professionals. The forum was open - audience participation was required. We offered prizes of energy drinks and chocolate bars as early morning caffeine incentives. The presentation was well received and there was much discussion and bragging rights to go around. So, we want to know, can you pass the test?

Use the Sample Laboratory Reports on the next page and the symbol key below to answer the following questions. Once you have selected your answers, visit www.envstd.com/lab-report.pdf to see if you know how to read a laboratory report.

**Examination Questions – For Laboratory Report #1 - Soil**

1. Which of the results is not dry-weight corrected?
   A. Benzene
   B. Xylene
   C. Both of the above
   D. None of the above
   E. Insufficient information

2. What is the result (ug/kg) for Xylene that should be reported to the regulator?
   A. 2.0
   B. 2 J
   C. 2.3 J
   D. < 2.3

3. Why were two analytical runs performed on one sample?
   A. Surrogates problems
   B. Additional dilution needed
   C. Internal standard problem
   D. Blank contamination

4. Which reported results were not likely conducted within holding time?
   A. All were within holding time
   B. All were outside holding time
   C. Benzene
   D. All but Benzene

5. If Benzene was reported from the second run, what might have been the laboratory qualifier for Benzene on Run #1?
   A. J
   B. B
   C. N
   D. E

**Examination Questions – For Laboratory Report #2 - Aqueous**

6. Is the reporting limit for naphthalene valid?
   A. Yes, because it meets my regulatory limit.
   B. Yes, because it is consistent with previously reported limits.
   C. No, because it is greater than my regulatory limit.
   D. No, because the instrument's sensitivity is above the reporting limit.

7. Which compound, if any, may not be native to the samples?
   A. Methyl *tert* Butyl Ether
   B. Naphthalene
   C. 1,2-Dichloroethane
   D. Cannot be determined.

8. Which results may NOT be considered estimated in Run #1 on the basis of surrogate recoveries?
   A. Methyl *tert* Butyl Ether
   B. 1,2-Dichloroethane
   C. *tert*-Butyl Alcohol
   D. Insufficient information

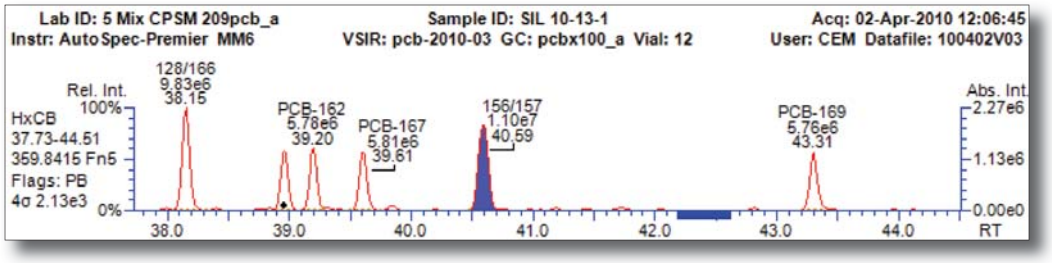
9. If your regulatory limit for 1, 2-Dichloroethane is 1.6 ug/L, based on the reported results, what should you report to the regulators?
   A. 1.64, Exceeded
   B. 1.6, Acceptable
   C. 2.0, Exceeded
   D. < 2, Acceptable

10. Are these data valid according to the method?
   A. Yes, with resubmittals from the laboratory.
   B. Yes
   C. No, we need to resample.
   D. Insufficient information

| | |
|---|---|
| > = Not detected | J = Indicates an estimated value |
| RL = Reporting Limit | B = Indicates analyte found in associated method blank |
| E = Indicates value exceeds calibration range | N = Indicates presumtive evidence of a compound |
| MDL = Method Detection Limit | |

# Environmental Forensics

With the opening of the East Tennessee office of Environmental Standards, we are strengthening our offerings in our Environmental Forensics practice. A recent US Supreme Court ruling underscored the importance of scientifically sound analysis to support source apportionment. The Court's ruling in *Burlington Northern & Santa Fe versus U.S.* upheld a lower court's ruling that, in the absence of technical evidence to support a potentially responsible party's position, the court could devise an apportionment based on a non-scientific analysis of recorded facts. According to the Ninth Circuit, the district court had "relied on the simplest of considerations: percentages of land area, time of ownership, and types of hazardous products." The court had further raised the estimated liability of the parties by 50% to account for possible error on the part of the court's own estimations. In the words of the *Harvard Law Review*, the Supreme Court's determination was "that the costs can be apportioned on the basis of rough estimates."




*Example PCB HxCB Ion Chromatogram*

**Laboratory Report #1 - Soil**

| | | | |
|---|---|---|---|
| **Client Sample ID:** | SB-11 (0'-2') | **Lab Sample ID:** | Z1235 |
| **Matrix:** | Soil | **Date Sampled:** | 3/26/08 |
| **Method:** | SW846 8260B | **Date Received:** | 3/27/08 |
| **Project:** | ALW #4567 | **Percent Solids:** | 92.5% |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch | Purge Volume |
|---|---|---|---|---|---|---|---|---|
| Run #1 | Z123456-2 | 2 | 4/1/08 | AW | 3/27/08 | XYZ | AL1569 | 5.0 mL |
| Run #2 | Z123456-3 | 5 | 4/10/08 | AW | 3/27/08 | XYZ | AL1570 | 5.0 mL |

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1320 | 5.0 | 1.0 | ug/kg | |
| 108-88-3 | Toluene | 1.9 | 2.0 | 0.54 | ug/kg | J |
| 100-41-4 | Ethylbenzene | 13.5 | 2.0 | 0.40 | ug/kg | |
| 1330-20-7 | Xylene (Total) | 2.0 | 6.0 | 2.3 | ug/kg | J |

| CAS No. | Surrogate Recoveries | Run #1 | Run #2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | 99% | 87-116% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 98% | 85% | 76-127% |
| 2037-26-5 | Toluene-D8 | 100% | 96% | 86-112% |

**Laboratory Report #2 - Aqueous**

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-15 | **Lab Sample ID:** | Z1234 |
| **Matrix:** | AQ | **Date Sampled:** | 3/26/08 |
| **Method:** | SW846 8260B | **Date Received:** | 3/27/08 |
| **Project:** | ALW #4567 | **Percent Solids:** | n/a |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch | Purge Volume |
|---|---|---|---|---|---|---|---|---|
| Run #1 | A789456-4 | 2 | 4/1/08 | AW | n/a | n/a | LW1287 | 5.0 mL |
| Run #2 | A789456-7 | 2 | 4/12/08 | AW | n/a | n/a | LW1288 | 5.0 mL |

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 1634-04-4 | Methyl *tert* Butyl Ether | 1.9 | 2.0 | 0.50 | ug/L | J B |
| 91-20-3 | Napthalene | 1.8 | 4.0 | 4.2 | ug/L | J |
| 107-06-2 | 1,2-Dichloroethane | 1.64 | 2.0 | 0.40 | ug/L | J |
| 75-65-0 | *Tert* -Butyl Alchohol | <7.8 | 20 | 7.8 | ug/L | |

| CAS No. | Surrogate Recoveries | Run #1 | Run #2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | 99% | 87-116% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 98% | 85% | 76-127% |
| 2037-26-5 | Toluene-D8 | 114% | 96% | 86-112% |

Scientifically sound technical analysis is expected to become more important than ever before in avoiding the risk of arbitrary judicial assessments.

Our chemists have specialized knowledge and experience in gathering site chemical-use history; performing chromatographic fingerprinting; identifying technical mixtures; identifying congener and homolog patterns; and identifying alternative sources, markers, and degradation features. Our chemists are also knowledgeable in designing and applying statistical analyses to provide science-based solutions to eliminate vast uncertainties in source identification and apportionment. We also employ techniques to determine the level of uncertainty associated with each analytical result. If the uncertainty of the analytical data is high enough to result in undue risk, we can refine the scientific approach to significantly reduce the chances of false elevations. This refining process is a critical step that distinguishes the data we bring to the source apportionment analysis. Together, these techniques increase the power of the analysis and help avoid the risk of undue expense and pain that can result from sloppy science.

While technical prowess is important, experience and judgment are critical. Although federal law regarding source apportionment applies generally, some individual states have statutes that apply to source apportionment. We are experienced in developing strategies in concert with legal teams to integrate the technical and legal approach to these cases; based on this experience and sound judgment, we can help place our clients in the strongest possible position to face high-risk situations. Give us a call (610.935.5577 or 865.376.7590) to discuss your situation in strict confidence. ■

# Early Planning and Active Management Improve Data Usability

In the past year, the Environmental Standards Information Technologies team has been assisting a confidential client with the collection and management of data generated from the remediation of a large fly ash release. Large projects are complicated in that data are generated by multiple sources, including (but not limited to) laboratories, sampling teams, third parties, and automated air and water sampling equipment. The data are submitted by teams that are usually disconnected from final data deliverables and in a variety of formats ranging from raw equipment output to Excel spreadsheets.

In this challenging and dynamic environment, careful planning of collection activities and ongoing data management are critical to producing quality data under "tight" deadlines. The data collection process is typically restricted to pre-determined valid values including sample locations, chains-of-custody (COCs) and sample names, and matrix codes. The use of valid values, combined with automated and manual checks at every stage of the data loading process, greatly decreases the chances of invalid data entering the database. Additionally, the use of valid values ensures that data nomenclature is uniform and descriptive, enhancing the ability of end-users to find what they are looking for.

The use of valid values starts in the field; therefore, sampling teams are the "first line" of focus in the QA/QC process. Nearly every step in COC and sample creation, including nomenclature, required fields, and valid values, is detailed in standard operating procedures (SOPs). The SOPs are disseminated to each sampler at each stage of the collection process and reviewed by the QA team on a regular basis for accuracy. SOPs are in place for data submissions from automated systems and third parties. SOPs and the underlying collection process are revisited on a weekly basis and adjusted as the rare exception or new type of sampling event occurs.

As the collection process becomes more defined and mature, focus naturally shifts to maintaining data usability through active management. Querying and using data for compliance with standards or action levels is merely the tip of the proverbial iceberg when it comes to data use. Clients often use the same data to reach out to the community, to satisfy compliance demands, to make time-critical remediation decisions, to present at symposia, and to contribute to special studies.

End-users' needs may vary greatly - even seemingly small changes to the business process must be carefully considered before implementation. Data generated by new or modified collection processes should be assessed for conformity and completeness with data generated from former processes. For example, a client names COCs using a code referencing the reason for sampling, such as "SS" for special study. Many end-users select or filter data from COCs based on the name; accordingly, COCs associated with new sampling events should still be descriptive and accurate and follow standard naming conventions, yet avoid conflicting with data from existing COCs.

Lastly, data usability is as much about the end-user and his/her knowledge of the content as it is about normalizing the data itself. End-users should have an adequate knowledge of how data are qualified and what the qualifiers mean, how the data are grouped and filtered, and what level of quality assurance/review the data have undergone. By understanding the content and how it is delivered via reports, end-users should be able to ascertain which data are appropriate for the intended audience. End-users should also understand how changes in business rules may affect how data are interpreted.

For information about how Environmental Standards can assist in addressing your environmental data management needs, contact Technical Director of Information Technologies/ Principal Dennis P. Callaghan at 610.935.5577. ■

## ISNetworld

In an effort to maintain a strong commitment to safety, many of Environmental Standards' clients have employed the services of ISNetworld (ISN) to collect and verify safety performance information from their vendors. ISN provides a resource to connect corporations with safe and reliable vendors by collecting, verifying the accuracy of, and reporting conformance information supplied by vendors. The ISN website allows corporations to select vendors that best meet their needs, as well as provides vendors the opportunity to easily manage their conformance information.

Environmental Standards is one of 24,000 subscribing vendors operating within ISN. Several of our clients are part of the 140 Owner/Clients operating within ISN.

Environmental Standards participated in an ISN Users conference on March 18, 2010, hosted by ArcelorMittal in Coatesville, Pennsylvania, in an effort to maintain high grades and good standing with our clients subscribing to ISN. Objectives of the conference were to provide vendors with guidance on how to be compliant with the requirements of their Owner/Clients and to educate vendors about the many benefits of participation.

In addition to the information management aspect, vendors like Environmental Standards can maximize their marketing exposure through ISN. ISN allows vendors to provide a description of their services and geographical area served, specify work industry classifications, upload a company logo, provide vendor specific documents (such as awards won, newsletter articles, and publications) as well as search for potential projects. ■

# VA DEQ PCB TMDL Monitoring

On March 6, 2009, the Virginia Department of Environmental Quality (VADEQ) published Total Maximum Daily Load (TMDL) Guidance Memo No. 09-2001, Guidance for monitoring of point sources for TMDL development using low-level PCB method 1668.

The monitoring guidance was created to help VADEQ collect data for the creation and implementation of a TMDL for polychlorinated biphenyls (PCBs) as a part of its statewide strategy to address PCB contamination in the waters of the Commonwealth.

In September 2009, facilities identified for PCB monitoring by VADEQ received a letter requesting the initiation of voluntarily sampling and reporting for PCBs using the ultra low-level detection US EPA Method 1668 (A or B). In accordance with Section 9 VAC 25-31-190.H of the Virginia Water Board's VPDES Permit Regulation and Part II.D of VPDES permits, VADEQ is requesting that sample collection be completed by March 2011. The request is voluntary at this time, but it is expected that PCB monitoring using a low-level detection method will be written into discharge permit requirements, as some facilities have already been made aware.

Point Source Dischargers will bear the greatest responsibility for the development and implementation of PCB TMDLs. Without data collected using the low-level method, VADEQ will estimate PCB loads. Expect that VADEQ will overestimate the total PCB contribution from facilities when there is an absence of data.

Waste Load Allocation (WLA) will be determined by the data collected. While the monitoring frequency for most facilities is minimal, the sampling, analysis and reporting are exceptionally rigorous and complex. It is imperative that the PCB monitoring process generate comparable data among the various identified facilities and their chosen laboratories and that all dischargers know and understand their data needs.

Environmental Standards' Quality Assurance Specialist/Principal David R. Blye, CEAC, assisted the members of the Virginia Manufacturers Association in providing comments on the VA DEQ's draft PCB monitoring guidance to the PCB Point Source Monitoring Technical Advisory Committee (TAC). Mr. Blye was invited to participate in the process because of his years of experience providing analytical technical expertise to the Delaware Estuary TMDL Coalition, a group of 12 companies and municipalities working with the Delaware River Basin Commission on the scientific and technical issues associated with the PCB TMDL on the Delaware Estuary. Mr. Blye, who also serves as the QA Program Manager for GE's Hudson River PCBs Site Remedial Action Monitoring Program, provided input on scientific and technical issues associated with the Delaware Estuary PCB TMDL as a member of the TAC Quality Assurance Subcommittee.

Environmental Standards, Inc. can help clients implement PCB monitoring at their facility by:

- Equipping clients with the necessary tools and information to ensure they meet the regulatory requirements for collecting and reporting the required data.
- Collecting samples or training personnel.
- Assisting with analytical laboratory procurement for this complex and unique method.
- Managing and overseeing contracted laboratories.
- Organizing and reviewing data prior to submission to VA DEQ to support TMDL efforts.
- Preparing and implementing Pollution Minimization Plans (PMPs).

For questions regarding Virginia's PCB Monitoring Guidance, please contact Quality Assurance Specialist/Principal David Blye at 610.935.5577 or dblye@envstd.com. ■

# 2010 Summer Conferences

**Goldschmidt 2010**, June 13-18, 2010, Knoxville, TN. Rock J. Vitale, CEAC, CPC, is a co-author of "Kingston Fossil Plant Ash Release - Assessment at One Year," which will be presented by William J. Rogers of the Tennessee Valley Authority.

**National Environmental Monitoring Conference (NEMC)**, August 9-13, 2010, Washington, DC. Technical Director of Chemistry/Principal Rock J. Vitale, CEAC, CPC, will present "Generating Meaningful Environmental Information from Laboratory Testing Data;" Quality Assurance Specialist/Principal Ruth L. Forman, CEAC, will present "How Confident Are You In Your MDL-Reported Analytical Results?;" and Senior Technical Chemist David Thal will act as Co-Chair during a Contaminated Sediments session. Also during a Contaminated Sediments session, "Performance Evaluation Sample Program for Hudson River PCB Site Sediment and Remedial Action Monitoring Programs" will be presented by Quality Assurance Specialist/Principal David R. Blye, CEAC; Senior Technical Chemist Meg A. Michell, M.S.; and Robert G. Gibson of General Electric.

**SWANA WasteCon Conference and Exhibition**, August 15-17, 2010, Boston, MA. Phillip D. McKalips, P.G., will present "Innovative Horizontal Drain Technology to Facilitate Landfill Gas Management." Print a free one-day pass for WasteCon at http://swana.org/Portals/Wastecon/WASTECON_2010-Show_Pass.pdf.

**30th International Symposium on Halogenated Persistent Organic Pollutants (POPs) - Dioxin 2010**, September 12-17, 2010, San Antonio, TX. David Thal will act as Chairman of a session and Environmental Standards is a proud sponsor of the conference.

**National Petrochemical and Refiners Association (NPRA) Environmental Conference**, September 20-21, 2010, San Antonio, TX. Environmental Standards representatives will attend this conference. ■

ENVIRONMENTAL STANDARDS™

Setting the Standards for Innovative Environmental Solutions



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# THE STANDARD

## New Jersey TCL/TAL List

Effective June 1, 2010, New Jersey will require the use of the most current US EPA TCL/TAL list (SOM01.2 & ISM01.2) when performing analyses at sites with unknown contamination – pursuant to N.J.A.C. 7:26E. Notice can be found at www.state.nj.us/dep/srp/guidance/tcl_tal/ and the most current TCL/TAL lists may be found at www.epa.gov/superfund/programs/clp/target.htm. ■

If you prefer to receive an electronic copy of *The Standard*, please e-mail Marketing Coordinator Abby Koss at akoss@envstd.com.

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