The purpose of this workshop is to highlight the challenges and complexities of contaminated sediments in urban harbors and ports, as well as methods for determining appropriate solutions. Our faculty will discuss methods for determining how, when, why, and by whom the contamination occurred. Case studies will illustrate state-of-the-art investigative tools. Further, this workshop will also cover the implications of such forensics work on economic, legal, remediation, and other issues. A special panel discussion will be held on methods and approaches for addressing complex sediment issues in Newark Bay, NJ. Newark Bay is part of the New York/New Jersey Harbor Estuary, and is one of the largest and most economically important ports in the United States. In this session, a panel of scientists and regulators who are currently involved with ongoing investigations in Newark Bay will discuss the issues associated with contaminated sediments and other environmental problems in the system, and describe techniques that are being used. The session will consist of a series of presentations, followed by an interactive panel discussion.
Environmental Forensics:
Urban Ports & Harbors - Sediment Assessments in Complex Systems

DAY ONE:
Tuesday, September 26, 2006
Moderator: David Ludwig, Ph.D., BBL Sciences, Inc.
8:00 – 9:00 Registration and Coffee
9:00 – 9:15 Welcome and Workshop Orientation
David Ludwig, Ph.D., BBL Sciences, Inc
9:15 – 10:00 Environmental Forensics: Overview and Application to Sediment Investigations
Diane L. Saber, Ph.D., Gas Technology Institute
10:00 – 10:45 Environmental Challenges Facing Ports and Harbors
Helder J. Costa, Haley & Aldrich, Inc.
10:45 – 11:00 Break
11:00 – 11:45 Complex PAH Allocations in Urban Sediments: Working with Attorneys to Meet the Needs of Litigation Strategies
David M. Mauro, META Environmental, Inc.
11:45 – 12:30 Potential Liability for Contaminated Sediment in Ports and Harbors
Paul Singarella, Esq., Latham and Watkins, LLC
12:30 – 1:30 LUNCH
1:30 – 5:00 Newark Bay Panel Discussion
Session Introduction and Objectives: An Overview of the Complex Environmental Issues in the Newark Bay Estuary
Timothy J. Iannuzzi, BBL Sciences, Inc.
Sediment Management Issues and the Regulatory Process in Newark Bay TBD
Remedial Investigation of the Newark Bay Estuary: Conceptual Model of Multichemical Investigations
Robert Romagnoli, P.E., BBL Sciences, Inc.
Tracing the Impact of the Passaic River on Newark Bay: Dioxins and Mercury
Edward A. Garvey, Ph.D., Malcolm Pirnie, Inc.
Identification of Historic and Present-Day Sources of Contaminants of Concern of the Newark Bay Estuary
Dennis Farley, The Intelligence Group, Inc.
5:00 Adjourn
5:00 – 7:00 Wine and Cheese Welcome Reception

DAY TWO:
Wednesday, September 27, 2006
Moderator: Glenn Johnson, Ph.D., University of Utah
8:00 – 9:00 Coffee
9:00 – 9:30 Review of Day One and Introduction to Day Two
Glenn Johnson, Ph.D., University of Utah
9:30 – 10:15 Use of Particle Scale Characterization of Contaminant Location and Binding in Environmental Forensics
Upal Ghosh, Ph.D., University of Maryland Baltimore County
10:15 – 11:00 PCB Chemical Forensics at the Lake Hartwell Superfund Site
Victor S. Magar, Ph.D., ENVIRON International Corporation
11:00 – 11:15 Break
11:15 – 12:00 Using Multi-Criteria Probabilistic Models to Evaluate Environmental Liabilities
Doug MacNair, Ph.D., Triangle Economics Research
12:00 – 12:45 Framing a View of the Seafloor: Imaging Approaches for Environmental Forensics
Drew A. Carey, Ph.D., CoastalVision, Inc.
12:45 – 1:45 LUNCH
1:45 – 2:30 Conducting Sediment Investigations Without 19th Century Tools...A Picture is Worth a Thousand Worms
Joseph Germano, Ph.D., Germano Associates, Inc.
2:30 – 3:15 Analysis of Chemical Data in Harbor Sediment Forensic Investigations
Glenn Johnson, Ph.D., University of Utah
3:15 – 3:30 Break
3:30 – 4:15 New Forensics Initiatives Regarding Contaminated Sediments within SERDP
Andrea Leeson, Ph.D., Strategic Environmental Research and Development Program (SERDP)/Environmental Security Technology Certification Program (ESTCP)
4:15 – 5:00 A Watershed History of Baltimore Harbor- Implications for the Future
Richard J. Wenning, Ph.D., ENVIRON International Corporation
5:00 Adjourn

Program Planning provided by: BBL Sciences, Inc.
The International Society of Environmental Forensics (ISEF) was created to facilitate communication and foster cooperation among professionals concerned with the evaluation of environmental contamination using environmental forensic techniques from a scientific or legal basis. The society is an international consortium of practitioners and faculty from a wide range of disciplines including: analytical chemistry, geochemistry, atmospheric chemistry, environmental fate assessment, environmental transport assessment and those involved with environmental litigation.

Environmental forensics includes investigating, interpreting and presenting evidence of source, fate, transport, composition, age, extent of or responsibility for contamination of all environmental media (i.e. air, soil, water or biota). The techniques are used to answer the following questions:

**WHO CAUSED THE CONTAMINATION?**

**WHEN DID THE CONTAMINATION OCCUR?**

**HOW DID THE CONTAMINATION OCCUR?**

**WHO COULD BE THE POTENTIALLY RESPONSIBLE PARTIES?**

**HOW DO YOU ALLOCATE REMEDIATION COSTS?**

**WHAT CAN BE INTERPRETED FROM THE ANALYSES?**

The goal of ISEF is to provide educational workshops and training on techniques that encompass the aspects of environmental forensics such as chemical fingerprinting, aerial photography, isotope age-dating of chemicals, geology and hydrogeology, field techniques and new equipment, laboratory methods and quality control, fate and transport modeling and environmental crime investigations. The society also serves to promote the publication and dissemination of relevant technical material in the journal *Environmental Forensics*, the official journal of ISEF.

For more information about the society contact the Managing Director, Cynthia Langlois, at:

**International Society of Environmental Forensics**

clanglois@aehs.com

413-549-5170 phone

413-549-0579 fax

www.EnvironmentalForensics.org

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**HOTEL AND TRAVEL INFORMATION**

**Wyndham Baltimore Inner Harbor:**

The Wyndham Baltimore - Inner Harbor puts you in the ideal spot for business and recreation. Located directly across from the Baltimore Arena and only minutes from the Baltimore Inner Harbor Convention Center, yet the elegance, history and fun of Baltimore's beautiful inner harbor are only three blocks away.

Enjoy the spacious suites and guest rooms, all with pillowtop mattresses and high-speed Internet access. A full fitness center and outdoor pool make it easy to unwind. Dine at one of the award-winning on-site restaurants, Shula's Steak House and Shula's Steak 2, where they serve up sizzling fare in a relaxed, comfortable setting.

Enjoy a vibrant neighborhood alive with activities, including the Morris Mechanic Theatre, Camden Yards, National Aquarium, and Maryland Science Center. At the Inner Harbor, you'll find a wide variety of top restaurants and shops to explore. Enjoy a beautiful sunset over the water, then revel in Baltimore's most exciting nightlife and live entertainment.

Visit the Wyndham Baltimore Inner Harbor website for a full description of hotel amenities:

http://www.wyndham.com/hotels/BWIH/main.wnt

101 West Fayette Street

Baltimore, MD 21201

Phone: 410-752-1100 or 877-999-3223

**Room Rate:** Single/Double: $169.00 + tax

- Participants are responsible for making their own room reservations. Please contact the hotel at the above phone number or website to make a reservation.
- Cut off date for reservations: September 1, 2006 to receive the above rate.
- You must mention the group name (ISEF) to receive our special group rate listed above.
- Check in time 4PM, check out time 12NOON

**Travel Information:**

The closest airport is Baltimore/Washington International Airport (10 miles away). Airport Code BWI.

**Driving Directions from BWI:**

Take 195 West to 95 North. Take Exit 53 (395 North). Follow 1/2 mile and turn right on Pratt Street. Proceed 3 blocks and turn left on Charles St. Proceed 3-4 blocks and turn left on Fayette Street. Hotel is 1 block ahead on the left.

**Shuttles and Cabs** are also available from the airport. Shuttles are about $12.00 one way. Cabs are about $25.00 one way.

For more information see the maps & directions section of the Wyndham's website: