

Vapor Intrusion Mitigation Workshop



June 11, 2007
Brown University (Providence, RI)

June 12, 2007
Radisson Hotel (Chelmsford, MA)




Co-Sponsored By:




Brown's SBRP (www.brown.edu/sbrp)

The screenshot shows a Mozilla Firefox browser window displaying the website for the Superfund Basic Research Program (SBRP) at Brown University. The browser's address bar shows the URL <http://brown.edu/Research/SBRP/index.html>. The website header features the text "Reuse In Rhode Island" with the tagline "a state-based approach to complex exposures" and the Brown University logo. A navigation menu includes links for "Home", "Contact", "Helpful Links", "Sitemap", "Brown's Program", "Projects", "Cores", "Sites In RI", "News & Events", and "Publications".

SBRP: The National Institute Of Environmental Health Sciences' Superfund Basic Research Program (SBRP) provides funding for research programs that support the work of the EPA's Superfund.
<http://www-apps.niehs.nih.gov/sbrp>



National Priorities List (NPL): The NPL is a list of the locations that are of most concern for either known or suspected pollution in the United States. There are currently 12 National Priorities List sites in Rhode Island.



REUSE IN RHODE ISLAND: A State-based Approach To Complex Exposures
Director: Kim Boekelheide, M.D., Ph.D.
Co-Director: Eric Suuberg, Sc.D., P.E.

The Superfund Basic Research Program (SBRP) at Brown University, titled "*REUSE IN RI: A State-Based Approach To Complex Exposures*", brings together scientists with interdisciplinary training from different backgrounds to work together in a cooperative and synergistic enterprise. Our biomedical researchers aim to develop new approaches to evaluating toxicant responses in sensitive and susceptible individuals that can be applied to real world exposure scenarios involving complex mixtures. Our engineering researchers will extend their laboratory-based research to modeling and remediation of complex polluted sites using novel materials and strategies. Together with our communications expert and team members from the State Departments of Health and Environmental Management, we will have a major impact on the understanding of the human health consequences and management of contaminated sites in Rhode Island and other heavily industrialized states.

Laboratory Research Applied to Real World Environmental Challenges

Seven research projects address theoretical and practical aspects of disease mechanisms and potential biomarkers associated with co-exposures.

Project 1: Testicular Sensitization And Co-Exposure Synergy

Led by: Kim Boekelheide, M.D., Ph.D.

Project 2: Genotoxic Potential Of Mixed Dust Exposures

Led by: Agnes B. Kane, M.D., Ph.D.

Project 3: Genetic Stress And Toxicant-Induced Pregnancy Disruption

Led by: Surendra Sharma, M.B.B.S., Ph.D.

Project 4: Biological Dosimetry Of Hexavalent Chromium

Led by: Anatoly Zhitkovich, Ph.D.

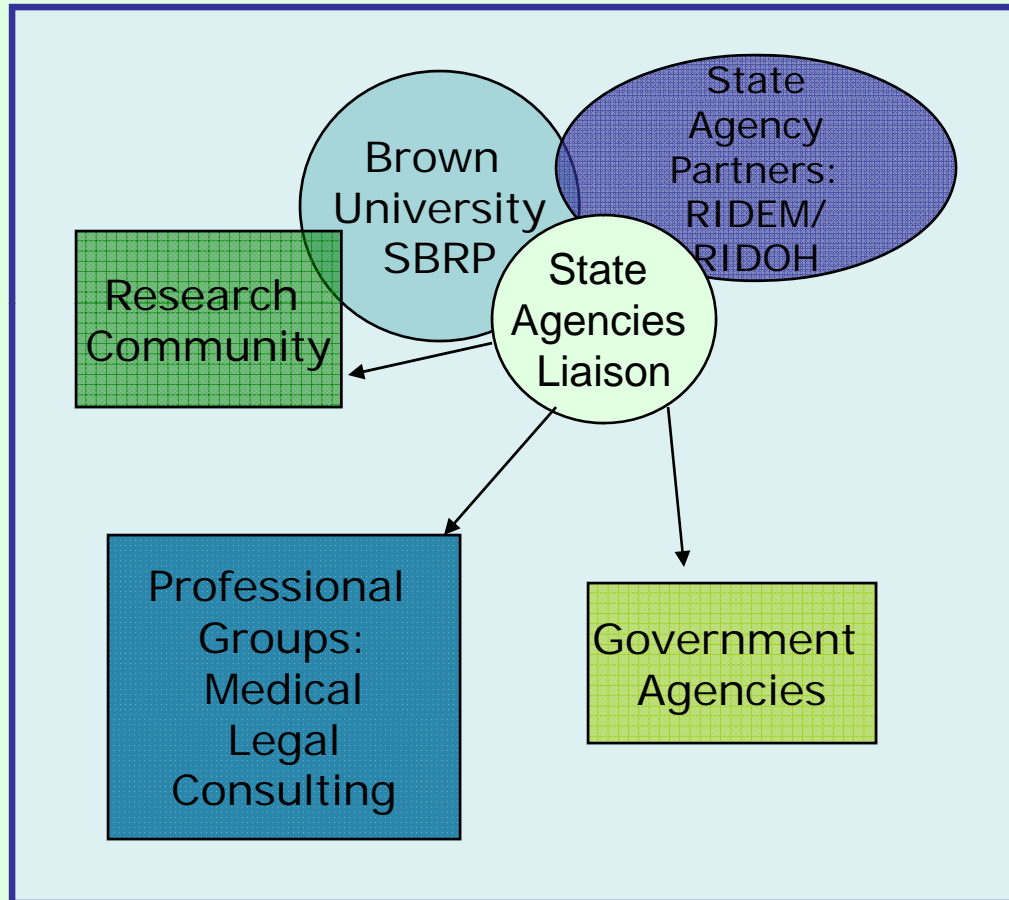
Project 5: Metals Removal Via Spouted Bed Electrolytic Reactors

Led by: Joseph M. Calo, Ph.D., P.E.

Project 6: Mechanisms of Mercury Adsorption and Metals Exposure from Mixed Pollutant Streams - Led by: Robert Hurt, Ph.D.

Project 7: Vapor Pressures And Thermodynamic Properties Of Complex Organic Containing Mixtures - Led by: Eric M, Suuberg, Sc.D., P.E.

Research Translation



Results of laboratory research are transferred to governmental agencies, environmental and public health professionals, and the research community

The SBRP supports training events for professionals who are tasked with the day-to-day activities related to reducing health risks associated with hazardous waste sites

Vapor Intrusion Mitigation Workshop Agenda

- 9:30** **Welcome and Introduction**, Kelly Pennell - Brown University
- 9:45** **Vapor Intrusion Mitigation - Applied Theory** , Ray Cody - EPA Region I
- 10:45** **Break**
- 11:00** **Vapor Intrusion Mitigation System - Performance Evaluation**
Bill Wertz - New York State DEC
- 12:00** **Lunch (provided)**
- 1:00** **Evaluation of the Effect of Vadose Zone Biodegradation on Vapor Intrusion
at Petroleum Hydrocarbon Sites**, Robert Ettinger – GeoSyntec
- 2:00** **Break**
- 2:15** **Installing Vapor Intrusion Mitigation Systems in Residential Settings: A Case
Study from the Raymark Superfund Site**, Ron Curran - CTDEP
- 2:45** **Gaining a Better Understanding of Vapor Intrusion using a 3-D Modeling
Approach**, Kelly Pennell - Brown University
- 3:15** **Open Discussion**
- 3:45** **Adjourn**