

***EPA ORD input to SBRP  
External Advisory Panel***

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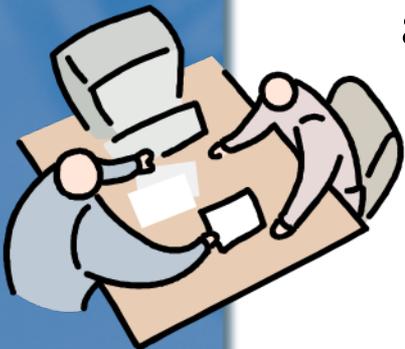
U.S. Environmental Protection Agency

Office of Research and Development

January 20, 2009

# 1. *What are the key, fundamental scientific issues EPA faces regarding hazardous waste..?*

- **Reducing the uncertainty of risk assessment and research on emerging technologies for site remediation are important topics.**
- **Linking biomedical research on effects with exposure scenarios**
- **Developing methods to assess the effects of chemical mixtures**
- **Using computational toxicity/genomics methods to address mixtures and streamline site assessment**



## **2. What are the emerging health/risk and remediation issues .. for future initiatives?**

- **Green remediation**
- **Reuse of remediated sites**
- **Energy conservation in operation and maintenance of sites**
- **Asbestos fiber effects and exposure**
- **Revised risk assessment methods**
- **Vapor intrusion**
- **Mining**
- **Alternative methods for decisions in the face of scientific uncertainty or debate**



### **3. .. communication of research findings that may have direct and immediate application ..?**

- **Direct application in the Superfund program can be defined as use at a site, incorporation into a risk assessment, use of science in guidance or in a criteria, and technical support.**
- **Is this a role that a basic research program wants to embrace?**
- **In joint presentations, SBRP has emphasized basic research whereas ORD has emphasized applied research.**
- **Suggest strengthening this relationship through collaborative research with ORD, linking of SBRP grantees to ORD scientists and technical support centers,**
- **Building EPA Regional relationships using ORD Superfund Technical Liaisons, which are located in each of EPA's ten Regions, as initial contacts for collaboration with Regional site managers and scientists.**

### **3b. What can SBRP program managers do to facilitate this process?**

- **Site demonstration of technologies can build interaction with EPA site managers.**
- **Meeting with risk assessors to review current chemical or site-specific risk assessments could build greater understanding by grantees of the issues facing the Agency.**
- **Consider if NIEHS grantees and EPA/ORD researchers can team to address a given research topic.**
- **Continue core emphasis on graduate student education and students' peer-reviewed publications**
- **Workshops with federal scientists on a given technical issue, e.g., ground water remediation, can build research partnerships and focus research areas.**
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## ***4. What activities and relationships would suit the primary objectives stated above?***

- **Creating research centers on issues such as mining, applied computational toxicity/genomics, contaminated sediments and ground water.**
- **Stressing the link between biomedical research and risk-assessment parameters is another important area to consider.**

## **4b. Are structures needed to encourage data sharing and coordination with EPA ..?**

- **ORD budgets \$2M per year to fund research topics, selected by the EPA Regions, where the Regional scientists work in collaboration with ORD scientists to conduct the research.**
- **Each Region has about \$200K to select a research topic and then they work with ORD scientists to address it**
- **The SBRP program could consider a similar program to enhance working with the EPA Regions on focused research topics.**



## **4. c and d**

- **ORD scientists have found the SBRP workshops and annual meeting to be valuable activities to communicate research and build coordination between agencies.**
- **The community-outreach activities, from our point-of-view, appear to be productive and a valuable component of the SBRP.**
- **Comments from the various community groups served by outreach activities would be a better indicator of its success.**