

**EPA Office of Solid Waste and Emergency Response (OSWER) Science Integration for Decision Making Fact-Finding Interview with OSWER Principal Deputy Assistant Administrator
December 1, 2009
Washington, DC**

Three members of the SAB Committee on Science Integration for Decision Making interviewed the Principal Deputy Assistant Administrator of OSWER's: Drs. John Balbus and James Johnson in person and Dr. Penny Fenner-Crisp by telephone. Dr. Vanessa Vu, Director of the SAB Staff Office, provided a brief introduction to the purpose of the interview. She noted that the purpose of the interview was to help SAB Committee members learn about OSWER's current and recent experience with science integration supporting EPA decision making so that the SAB can develop advice to support and/or strengthen Agency science integration efforts. Dr. Vu thanked Mr. Breen for taking time for the interviews.

Dr. Angela Nugent, Designated Federal Office for the committee, took notes to develop a summary of the conversation. Mr. Breen was provided a copy of the committee's Preliminary Study Plan in advance.

**Interview with OSWER Principal Deputy Assistant Administrator
Mr. Barry Breen**

The committee members asked Mr. Breen to describe how he viewed science fitting into the overall activities of his office and his decision making and the drivers and barriers to science integration.

Mr. Breen responded that OSWER is a "huge consumer of science" and may be distinctive because decisions pertain both to national rules and guidance and site-specific decisions. For site-specific decisions, time is critical. EPA must make decisions about drilling wells, moving earth, short and long-term cleanups. The current science is critical to the decision. If important science is emerging, however, EPA cannot wait. The Integrated Risk Information System (IRIS) is hugely important and OSWER is "pushing to get files into IRIS." Where IRIS values don't exist, OSWER uses ORD provisional peer review toxicity values. ORD has guidance describing a hierarchy for using toxicity values. He asked the OSWER science advisor, Dr. William Sette, to provide the committee with this guidance.

Site-specific clean-ups offer the opportunity for public comment. EPA receives some scientific input as part of this public comment.

Mr. Breen noted that regions play a big role in OSWER programs. There are approximately 600 OSWER staff at Headquarters and 3,000 staff in the regions.

In response to an SAB member's question about how OSWER evaluates the use of science, Mr. Breen responded that there is no formal system. Similar to OSWER evaluation of its use of legal advice, managers have a sense of "how well the science supporting decisions was received" or "how well the science supporting decisions was accepted."

SAB members asked about barriers to using the best science. Mr. Johnson responded that OSWER depends on the National Contingency Plan, which sets up rules about the use of science and defines categories of scientific values as applicable or relevant and appropriate. Following those rules, a Drinking Water Advisory is in the "to be considered" category, while use of a Maximum Contaminant Level is mandated. Where OSWER cannot identify values, it must search for values and decisions are delayed.

In general, the Superfund program tries to use inputs from other organizations (e.g., Office of Water, Office of Research and Development, Minimal Risk Levels (MRLs) for Hazardous Substances generated by the Agency for Toxic Substances and Disease Registry) and tries not to generate its own scientific values. One example of OSWER generating science is OSWER's support of ORD toxicity studies on Libby amphibole asbestos.

An SAB member asked about OSWER's efforts to address cumulative exposure and mixtures, in light of emerging science and National Research Council reports. Mr. Breen responded that the National Contingency Plan, developed in the 1990's, has guidance on how to address cumulative exposure and mixtures. In his view, the plan has "lots of texture," which allows EPA to acknowledge that sites have more than one contaminant. The plan calls for setting a preliminary remediation goal that will meet the most stringent of applicable values. The plan also allows EPA to go further in light of interactions. In his view, emerging science can be accommodated by the plan. The OSWER science advisor also noted that OSWER has guidance on aggregating exposures, using a hazard index approach for combining risk across pathways. Mr. Breen noted that some assessments include considerations of the exposed population's diet and background exposures.

Mr. Breen acknowledged that most OSWER decisions depend on health risk information, rather than ecological assessment information.

SAB members asked about the nature of OSWER's engagement of stakeholders and the public in site-clean-up efforts. Mr. Breen responded that community involvement coordinators are part of the standard case team at National Priority Locations. EPA "aspires" to the goal of seeking information about community members' priorities at every site, but he was "not aware of how successful such efforts have been."

SAB members then asked whether OSWER has all the support needed for science integration. Mr. Breen noted that the OSWER's Assistant Administrator can draw on a team of two scientists and can rely on the Office of Research and Development for help. He noted that OSWER conducts annual meetings for managers and members of case teams. Science is an important part of each meeting. Despite limited budgets for training, the Clu-in program provides an important resource for personnel at Headquarters and in the regions.