

**SAB Science Integration for Decision Making Fact-Finding Meeting
Office of Research and Development, Office of Science Policy
EPA West, Washington, DC
January 28, 2010**

Four members of the SAB Committee on Science Integration for Decision Making conducted an interview in EPA's Office of Research and Development (ORD), Office of Science Policy (OSP): Drs. James Johnson and Gary Sayler conducted the interview in person, and Drs. Terry Daniel and Thomas Theis participated by telephone. Dr. Vanessa Vu, Director of the SAB Staff Office, provided a brief introduction to the purpose of the interview and the Designated Federal Officer, Dr. Angela Nugent, took notes to develop a summary of the conversation. All interviewees were provided a copy of the committee's Preliminary Study Plan in advance.

Dr. Vu noted that the purpose of the interview was to help SAB Committee members learn about OSP'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 participants for taking time for the interviews.

Meeting with the Office of Research and Development (ORD), Office of Science Policy (OSP) (January 28, 2010, 3:30 p.m. - 5:00 p.m.) Participants:

Dr. Fred Hauchman, Director
Ms. Mimi Dannel, Acting Deputy Director
Dr. Bruce Rodan, Senior Science Advisor
Mr. Robert Fegley, Acting Program Support Staff Chief
Dr. Nigel Fields, Regional Staff Chief
Dr. Ronald Landy, Previous Regional Staff Chief

The Office of Science Policy (OSP) is one of four ORD offices in Washington, D.C. It assists the ORD Assistant Administrator with high priority, urgent issues. It has three staffs: a Program Support Staff, a Regional Science Program Staff, and a Cross-Program Staff.

The Program Support Staff is involved with all of EPA's major regulatory issues and has a land team, water team, and air team. OSP representatives participate in EPA's Action Development Process and sit in on discussions of all Tier 1, most Tier 2 and some Tier 3 actions depending on the likelihood that science issues will be addressed in the action. The Program Support Team also responds to congressional enquiries and provides technical information when requested by EPA's Office of Congressional and Intergovernmental Relations.

When issues are identified, OSP involves staff from across ORD, as appropriate, and represents ORD's corporate view in the Action Development Process. One example is OSP's role in recent activities involved in mountaintop mining. OSP staff know the science issues, are "politically savvy," are clear communicators, and have diplomatic skills. They involve ORD laboratories and centers in priority issues and mediate among them to represent ORD's views.

OSP staff provide ORD's political leadership their best scientific judgment on topics, realizing that "at the end of the day, decisions are made by EPA's political leadership." Scientists provide their honest views and characterization of uncertainties. Science is always considered in senior-level meetings when there are science issues, though there are some policy decisions that are not science-based. During the Action Development Process, the lead program office typically develops and delivers a briefing to the decision maker. The Administrator (for Tier 1 actions) asks for input from all offices attending the briefing before she makes a decision. She is especially interested in knowing the major areas of controversy and uncertainty.

A barrier to science integration is the limited time to discuss complex science. Decision makers are busy, and some subtleties can get lost unless there is sufficient time to fully communicate the uncertainties. The best communications involve ongoing conversations, where scientists communicating a complex issue get feedback that helps them understand when they are communicating effectively about these uncertainties.

OSP generally does not interact with the public, although ORD does participate in public meetings to discuss scientific issues associated with important programmatic/regulatory activities. For example, many years ago, ORD was heavily involved in supporting the Office of Water in the development of the Microbial/Disinfection Byproducts (M/DBP) Rule. The M/DBP Rule was developed through a negotiated rulemaking process that involved extensive discussions with stakeholders about the use of ORD science.

ORD's Regional Science Program Staff supports regional Superfund and Technical Liaisons (STL) and Regional Science Liaisons (RSL). The STL in each region is charged with bringing ORD science to regional Superfund programs and identifying regional needs. The RSLs address broader science issues and serve as liaisons between their region and ORD. The RSLs are responsible for managing the programs described below. ORD pays the salaries for the RSLs, but they are regional employees

OSP is involved with ORD's efforts to strengthen relationships with regional scientists. OSP administers the \$2 million/year Regional Applied Research Effort (RARE) Program and the Regional Methods (RM) Program. These two programs are specifically designed to address the high priority, targeted and immediate research and analytical methods needs of the regions. OSP sponsors the regional workshop series on emerging science issues. It supports RSLs in managing the Regional Research Partnership Program, which offers regional scientists the opportunity to work with scientists in ORD laboratories/centers on research projects of interest to the regions. All these programs, though limited, have been successful. OSP acknowledged that they could publicize the benefits and outcomes of the programs more effectively.

It has been challenging to involve the regions in ORD's research planning process. High transaction costs are barriers to meaningful involvement and the many regional needs far outstrip ORD resources. OSP relies on RSLs, National Program Directors, ORD Laboratories and Centers, and ORD programs to coordinate with regions in ORD's planning process.

Often regional needs for research results involve a completely different timeframe than ORD research. Regions need science to solve immediate problems or problems within a one-

year window. ORD research can have a five-year or longer horizon. As mentioned above, the RARE and RM programs are designed to help address this issue.

One OSP interviewee distinguished between research (the creation of new knowledge) and science (the organization of knowledge or information together in a logical framework). ORD is EPA's research organization; there are scientists throughout EPA.

Sometimes ORD can offer the "full spectrum" of what regions need: research results and technical support. If regions have a priority need, there is a process to identify it and submit it to OSP. OSP will "pull people together" in response." One example is OSP's role in recent activities involved in mountaintop mining. OSP followed this issue and drew ORD's National Center for Environmental Assessment into the discussion. OSP, however, has not documented the percentages of the universe of requests from regions that go unanswered. There was a general sense, however, that "often regions want something different than what ORD can offer."

ORD's Executive Council has recently discussed the issue of regional technical support. ORD managers have the general sense that currently ORD scientists spend a significant amount of time responding to regional needs for support. There may be a need for OSP to work with the lead ORD region and build on past experience with the ORD Regional Science Summit to develop a consolidated list of highest priority regional issues.

In the past, EPA had a national regional science council, but that organization no longer exists. Although the ten regions have a set of common needs, each region has unique needs because of their history and geography.

OSP's Cross Program Staff has the responsibility for the development, coordination and oversight of office-wide strategies for ORD involvement in issues that cut across EPA's traditional program-specific emphasis. Primary activities include support for ORD's Board of Scientific Counselors, Environmental Justice, the Federal Technology Transfer Act program, the Tribal Science Program, and multi-media efforts, including international activities.