SAB Science Integration for Decision Making Fact-Finding Meeting
Office of Water, Office of Wastewater Management
EPA East, Washington, DC
January 20, 2010

Two members of the SAB Committee on Science Integration for Decision Making conducted one interviews in EPA's Office of Wastewater Management (OWM): Drs. James Johnson and Gary Sayler. 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 in each interview that the purpose of the interview was to help SAB Committee members learn about OWM'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 Water, Office of Wastewater Management Office Director and Management Team (11:00 a.m. - 12:30 p.m.) Participants:

Mr. James Hanlon, Director
Mr. Randolph Hill, Deputy Director
Ms. Sheila E. Frace, Director, Municipal Support Division
Ms. Deborah Nagle, Associate Division Director of the Water Permits Division

Usually, OWM applies science generated by others in its permit decisions, rulemakings, and policy letters. The office becomes more actively involved in science when science must be created to address a new issue specifically for OWM, as for the ""vessel general permit," where the office used and adapted existing scientific information and worked with other federal agencies, such as the U.S. Coast Guard, to better understand potential environmental impacts caused from vessel discharges and to develop control measures for vessel discharges. OWM faces court orders and time constraints for assessing available information and only conducted very cursory peer review. OWM is planning to seek advice from the SAB in the future for modifications to the general permit relative to technologies for reducing endangered species from ballast waters.

OWM also sought special science for decision-making at the suggestion of stake holders for reauthorization of the wastewater program. OWM sought science advice from the National Research Council to strengthen its storm water program. Another focus has been generation of science to strengthen voluntary programs. OWM has encouraged research for the "Water Sense" voluntary program for water conservation.

Stakeholder involvement happens in the OWM process through traditional means (e.g., public comment on rulemakings, policy decisions, and permits, and public meetings) but generally does not focus on science issues.

OWM recently participated in a new OW research strategy and is working with ORD and the Water Environment Research Foundation on research related to infrastructure, guidance for municipalities, and nutrients.

Impediments for integrating science for decision making include:

- Lack of data due to impediments such as the information collection requirements under the Paperwork Reduction Act.
- Conflicting interpretations of available science
- Political or economic factors that make science-based options difficult to implement.
- Scientific recommendations difficult to implement because of statutory constraints
- Funding for the 104(b)(3) program (which was a grant program that funded scientific studies) was eliminated from EPA's appropriations several years ago.

OWM foresees future science needs related to emerging contaminants in wastewater (e.g., micro-contaminants, nanoproducts, pharmaceuticals, total dissolved solids from mountaintop mining, extracted waters generated by technologies used for Marcellus Shale drilling, residues from scrubber gas technologies, and nutrients). The human health and ecological risks have not yet been identified for these emerging contaminants and appropriate water treatment technologies have not been fully vetted. In addition, water contamination can be a highly political issue, since there are high civil penalties for permit violations.

OWM must participate in strategic research planning, so that future science needs get attention from ORD and outside scientific organizations. OWM seeks a clearer process for research planning with ORD and opportunities for more effective coordination on wastewater program research needs.