


New Recreational Water Quality Criteria

*Obtaining stakeholder input on key
questions about EPA's approach and the
needed science to get there*

December 5, 2006



Did you know that.....

- A gram of human waste has over 1 billion viruses and bacteria?
- There are over 1,400 disease-causing microbes in humans, including bacteria, viruses, fungi and parasites?
- About 15 million of 57 million annual deaths worldwide are estimated to be related to “infectious diseases”?
- Microbial agents are being found to cause chronic diseases too?
 - e.g., Human papillomaviruses and cervical cancer



Did you know that.....

- 38 new pathogens have moved into humans from other animal species in just the past 25 years?
- New genetic variants of “old” pathogens are also in play?
- Some researchers believe that there is a faster rate of disease appearance today, partly because “transportation, trade, human population growth, and environmental change are going on at unprecedented rates”?



Why are we here?

- EPA's criteria to protect swimmers from microbial illness are 20 years old, based on indicators of fecal contamination, and reflect the science of over 20 years ago
- It is time for new or revised criteria that advance public health protection
 - EPA needs your input to do the best it can with the science that exists and the science that can be completed in the near term to issue new CWA 304(a) criteria for recreation



General Overview of Criteria Development Process

- Define objectives and approach
 - What am I trying to protect and what approach should I follow in criteria development?
- Assess current state of the science relative to objectives and desired approach
- Identify science or research needs
- Conduct research to address needs
- Evaluate research results and supplement with additional science as needed
- Develop criteria



Why are you here?

- EPA wants a more participatory process
 - EPA's ORD has done a lot of good science over the past 5 years to support criteria development and we want to know whether we are on the right path.
- EPA recognizes that science continues to rapidly evolve and that bringing the best science to bear means keeping open and receptive to external input
- New criteria must be able to be implemented and understanding implementation needs and questions up front should improve the usefulness of newly developed criteria---states are great at identifying implementation issues



What is Success Today?

- EPA hears stakeholder views and obtains valuable input on the questions that EPA should be bringing to its Pellston-type Expert Workshop in March 2007
 - *EPA expects the Expert Workshop to deliver to EPA a “draft” Critical Path Research Plan*
 - *The purpose of the Experts Workshop is to confer with and obtain input from the broader scientific and technical community on: (1) the critical path for needed science and (2) the approach EPA should follow in developing new or revised 304(a) recreational criteria in the near term.*



What is a Pellston-type Experts Workshop?

- ❑ Convene a group of national and often international scientific and technical experts (maybe 30-40 scientists in this case)
- ❑ Sequester them away for 5 days (give or take) and nights with a list of science or technical questions that the Agency is struggling with
- ❑ Give them clear direction on the desired output at the end of day 5 and don't let them leave until they cough it up
- ❑ Provide recordkeeping, notetaking and other similar support
- ❑ Collect a draft product at the end of day 5
- ❑ Spend the next 30 days (sometimes more) finalizing the Report from the Workshop



What input is EPA Specifically Seeking Today?

- Input on the overarching charge questions to the Expert Workshop
- Input on topic areas that will be the focus of discussions at the Expert Workshop
- Input on the topic-specific charge questions to the experts



EPA's Proposed Overarching Charge to Experts

- Assess whether EPA's current thinking on the path to follow to conduct research and develop criteria in the near-term is the best path to be on, given the "state of the science"
- Provide input on critical path research needs for development of criteria over the near term such that the criteria:
 - Are scientifically sound
 - Are implementable for broad CWA purposes
 - Should provide for improved public health protection over the 1986 criteria
- Recognize that research that cannot be completed within 3-4 years will not be helpful in EPA's near-term criteria development efforts



Output of Expert Workshop

- Draft components of a critical path research plan at close of Expert Workshop
- Final components of a critical path research plan by April 2007



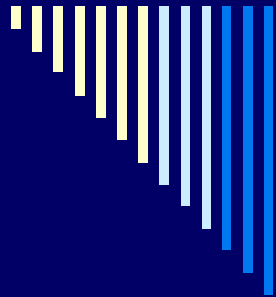
What's the Flow for Today?

- A little time on where we've been (the short history of rec criteria issued by the federal government)
- A little time on the BEACH Act mandate to update the 1986 criteria
- A little time going over what 304(a) criteria are and how they are used in CWA Programs
- We'll talk briefly about where we are in the process of developing new or revised criteria and what our current thinking is
- EPA's ORD will summarize the research EPA has conducted to support new recreational criteria development



What's the Flow for Today?

- Then.....we will spend the remainder of the day walking through and getting feedback from you on the Overarching Charge, the focus topics for the Expert Workshop, and the charge questions for the focus topics for the Expert Workshop



Thanks for coming
and.....enjoy.