

**U.S. Environmental Protection Agency
Science Advisory Board Panel for the Review of
Hydraulic Fracturing Study Plan**

Public Meeting, March 7-8, 2011

Westin Alexandria Hotel located at 400 Courthouse Square, Alexandria, VA, 22314

Agenda

Purpose: To review and provide advice on the scientific adequacy and appropriateness of EPA's Draft Hydraulic Fracturing Study Plan that will assess the potential impacts of hydraulic fracturing on drinking water resources.

Monday, March 7, 2011

9:00 am	Opening and Welcoming Remarks	Mr. Edward Hanlon <i>Designated Federal Officer EPA Science Advisory Board Staff Office</i>
		Dr. Vanessa Vu <i>Director EPA Science Advisory Board Staff Office</i>
9:05 am	Introduction of Members and Review of Agenda	Dr. David A. Dzombak <i>Chair</i>
9:15 am	EPA's Presentation	Dr. Kevin Teichman EPA Office of Research and Development
		Ms. Jeanne Briskin EPA Office of Research and Development
		Dr. Robert Puls EPA Office of Research and Development

Monday, March 7, 2011 (continued)

9:55 am	Public Comments	Registered Speakers
10:30 am	Break	
10:45 am	Public Comments	Registered Speakers
11:45 pm	Lunch	
12:45 pm	Discussion of Charge Questions	
12:45 pm	<ul style="list-style-type: none">• Charge Question 1: Water Use in Hydraulic Fracturing	Lead Discussants: Dr. Philip M. Gschwend Dr. Michel C. Boufadel Dr. Jeffrey K. Griffiths
1:35 pm	Summary of Discussion on Charge Question 1	Dr. David A. Dzombak and Panel Members
1:50 pm	<ul style="list-style-type: none">• Charge Question 2: Research Questions	Lead Discussants: Dr. Danny D. Reible Dr. George Alexeeff Dr. Duncan T. Patten Dr. Shari Dunn-Norman
2:40 pm	Summary of Discussion on Charge Question 2	Dr. David A. Dzombak and Panel Members
2:55 pm	Break	
3:10 pm	<ul style="list-style-type: none">• Charge Question 3: Research Approach	Lead Discussants: Dr. Jeanne M. VanBriesen Dr. Cynthia M. Harris Dr. Geoffrey D. Thyne
4:00 pm	Summary of Discussion on Charge Question 3	Dr. David A. Dzombak and Panel Members

Monday, March 7, 2011 (continued)

4:15 pm	<ul style="list-style-type: none">• Charge Question 4(a): Proposed Research Activities: Water Acquisition	Lead Discussants: Dr. Stephen J. Randtke Dr. Elizabeth W. Boyer Dr. Connie K. Schreppel
5:05 pm	Summary of Discussion on Charge Question 4(a)	Dr. David A. Dzombak and Panel Members
5:20 pm	Recess	Mr. Edward Hanlon

Tuesday, March 8, 2011

8:00 am	<ul style="list-style-type: none">• Charge Question 4(b) Proposed Research Activities: Chemical Mixing	Lead Discussants: Dr. Cindy M. Lee Dr. Danny D. Reible Dr. Jeffrey K. Griffiths
9:00 am	Summary of Discussion on Charge Question 4(b)	Dr. David A. Dzombak and Panel Members
9:15 am	<ul style="list-style-type: none">• Charge Question 4(c) Proposed Research Activities: Well Injection	Lead Discussants: Dr. Thomas L. Davis Dr. Philip M. Gschwend Dr. Nancy K. Kim
10:15 am	Break	
10:30 am	Summary of Discussion on Charge Question 4(c)	Dr. David A. Dzombak and Panel Members
10:45 am	<ul style="list-style-type: none">• Charge Question 4(d) Proposed Research Activities: Flowback and Produced Water	Lead Discussants: Dr. David B. Burnett Dr. John P. Giesy Dr. Radisav D. Vidic

Tuesday, March 8, 2011 (continued)

11:45 am	Summary of Discussion on Charge Question 4(d)	Dr. David A. Dzombak and Panel Members
12:00 pm	Lunch	
1:00 pm	<ul style="list-style-type: none">• Charge Question 4(e) Proposed Research Activities: Wastewater Treatment and Waste Disposal	Lead Discussants: Dr. Thomas P. Ballestero Dr. Mark Benjamin Dr. Connie K. Schreppel
2:00 pm	Summary of Discussion on Charge Question 4(e)	Dr. David A. Dzombak and Panel Members
2:15 pm	<ul style="list-style-type: none">• Charge Question 5 Research Outcomes	Lead Discussants: Dr. Mark Benjamin Dr. Cynthia M. Harris Dr. Cindy M. Lee
3:15 pm	Break	
3:30 pm	Summary of Discussion on Charge Question 5	Lead Discussants and Panel Members
3:45 pm	Panel Discussion on Remaining Issues Action Items and Next Steps	Dr. David A. Dzombak and Panel Members
5:00 pm	Adjourn	Mr. Edward Hanlon