

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
SCIENCE ADVISORY BOARD  
Libby Amphibole Asbestos Review Panel  
Public Meeting, February 6-8, 2012  
Westin Alexandria Hotel  
400 Courthouse Road  
Alexandria, VA 22314**

**AGENDA**

**Purpose:** To review EPA's draft *Toxicological Review of Libby Amphibole Asbestos* available at <http://yosemite.epa.gov/sab/sabproduct.nsf/02ad90b136fc21ef85256eba00436459/7639c111cc33a48a8525762e007a431a!OpenDocument>

**Monday, February 6, 2012**

9:00 - 9:20 a.m.	<b>Convene Meeting</b>	Dr. Diana Wong Designated Federal Officer
	<b>Welcoming Remarks</b>	Dr. Vanessa Vu, Director EPA Science Advisory Board Staff Office
	<b>Purpose of the Meeting Review of Agenda</b>	Dr. Agnes Kane, Chair
	<b>Introduction of Panel Members</b>	Panel Members
9:20 - 9:30 a.m.	<b>EPA Remarks</b>	Ms. Becki Clark, Acting Director EPA National Center for Environmental Assessment, Office of Research and Development (NCEA/ORD)
9:30 - 10:30 a.m.	<b>Technical Overview of EPA's Draft Toxicological Review</b>	Dr. Deborah McKean Region 8  Mr. David Bussard, Director Washington Division, NCEA/ORD
10:30 - 10:45 a.m.	<b>Break</b>	

10:45 – 11:30 a.m.	<b>Public Comments</b>	Registered Speakers
11:30 a.m. – 12:15 p.m.	<b>Discussion of EPA’s Charge to SAB</b>	Dr. Kane and Panel
	<b>Panel Discussion of Responses to EPA Charge Questions</b>	
	<b>Chapter 2- Geology, Use, and Exposure</b> (General charge questions 1 and 2; and charge question I.A.1a)	Drs. <u>Gutherie</u> , <u>Southard</u> , Webber
12:15 – 1:15 p.m.	<b>Lunch</b>	
1:15 – 1:45 p.m.	<b>Chapter 3- Fiber Toxicokinetics</b> (General charge questions 1 and 2; and charge question I.A.1b)	Drs. <u>Lippmann</u> , <u>Everitt</u>
	<b>Chapter 4- Hazard Identification</b>	
1:45 – 3:15 p.m.	<b>Section 4.1- Studies in Humans-Epidemiology</b> (General charge questions 1 and 2; and charge questions II.A.1 and II.A.2)	Drs. Kriebel, <u>Newman</u> , Peto, Sheppard, <u>Woskie</u>
	<b>Sections 4.2, 4.3, 4.4- Animal and Mechanistic Studies</b> (General charge questions 1 and 2; and charge question II.A.3)	Drs. Bonner, <u>Everitt</u> , <u>Hei</u> ,
3:15 – 3:30 p.m.	<b>Break</b>	
3:30 – 5:30 p.m.	<b>Section 4.5- Synthesis of Non-Cancer Effects and Section 4.7- Susceptible Populations</b> (General charge questions 1 and 2)	Drs. <u>Balmes</u> , Bonner, Hei, <u>Redlich</u>
	<b>Sections 4.6- Weight-of-Evidence Evaluation of Carcinogenicity and Mode of Action</b> (General charge questions 1 and 2; and charge questions II.B.1, II.B.2, and II.B.5)	Drs. Everitt, <u>Hei</u> , Lippmann, Neuberger, Salmon, <u>Walker</u>
5:30 p.m.	<b>Recess for the Day</b>	

**Tuesday, February 7, 2012**

8:30 a.m.	<b>Reconvene</b>	Dr. Diana Wong, Designated Federal Officer
	<b>Panel Discussion of Responses to EPA Charge Questions (continued)</b>	
8:35 -10:30 a.m.	<b>Chapter 5- Exposure-Response Assessment</b>	
	<b>Sections 5.2 and 5.3-Inhalation Reference Concentration (RfC) and Uncertainties</b>	
	Exposure Estimate (charge question III.A.1)	Drs. <u>Harris</u> , Lippmann, <u>Webber</u> , <u>Woskie</u>
	Exposure Response Modeling (charge question III.A.2); and Alternate Modeling Approaches (charge question III.A.3)	Drs. <u>Pennell</u> , Salmon, Sheppard, <u>Woskie</u>
	Confounders and Covariates (charge question III.A.4)	Drs. <u>Kriebel</u> , Neuberger, <u>Peto</u>
	Cumulative Exposure (charge question III.A.5)	Drs. <u>Pennell</u> , Salmon, <u>Sheppard</u> , <u>Woskie</u>
	Uncertainty Factors (charge question III.A.6)	Drs. <u>Balmes</u> , Bonner, Hei, Kriebel, <u>Salmon</u>
	Characterization of Uncertainties (charge question III.A.7)	Drs. Kriebel, <u>Sheppard</u> , <u>Webber</u>
10:30 - 10:45 a.m.	<b>Break</b>	
10:45 a.m. - 12:00 p.m.	<b>Section 5.4 Cancer Exposure Assessment</b>	
	Selection of Principal Study; and Endpoint Selection (charge questions II.B3 and II.B.4)	Drs. <u>Neuberger</u> , <u>Newman</u> , Peto, Redlich
	Exposure-response Modeling and Confounders (charge questions III.B.1 and III.B.2)	Drs. <u>Ferson</u> , Kriebel, Pennell, <u>Peto</u> , Salmon

12:00 p.m. - 1:00 p.m.	<b>Lunch</b>	
1:00 p.m. - 3:00 p.m.	Derivation of Inhalation Unit Risk (IUR) (charge question III.B.3)	Drs. <u>Ferson</u> , Pennell, <u>Peto</u> , Salmon
	Mesothelioma Mortality Adjustment (charge question III.B.4)	Drs. Kriebel, Peto, <u>Neuberger</u> , <u>Lippmann</u>
	Uncertainties (charge question III.B.5)	Drs. <u>Ferson</u> , Pennell, Salmon, <u>Walker</u>
3:00 - 3:15 p.m.	<b>Break</b>	
3:15 - 4:15 p.m.	<b>Chapter 6 –Major Conclusions</b> (General charge question 1)	
	<b>Section 6.1- Hazard Potential</b>	Drs. <u>Balmes</u> , Bonner, <u>Everitt</u> , Gutherie, Hei, Kriebel, Neuberger, Newman, Redlich, <u>Southard</u>
	<b>Section 6.2- Exposure Response</b>	Drs. <u>Ferson</u> , Harris, Lippmann, Pennell, Peto, <u>Sheppard</u> , Woskie
	<b>Section 6.3- Application of RfC and IUR</b>	Drs. <u>Salmon</u> , <u>Walker</u> , Webber
4:15 – 4:30 p.m.	<b>Public Comments</b>	
4:30 - 5:30 p.m.	<b>Writing Session by Subgroups</b>	
5:30 p.m.	<b>Recess for the Day</b>	

**Wednesday, February 8, 2012**

8:00 - 10:00 a.m.	<b>Writing Session by Subgroups</b> (continued)	
	<b>Panel Discussion on Summary Response for the Executive Summary</b>	
10:30 - 11:00 a.m.	Overall Comments (Summary response to charge questions 1 and 2, pertaining to all chapters )	Drs. Gutherie, Harris, Hei, <u>Newman</u> , Southard, <u>Woskie</u>

11:00 a.m. - 12:00 p.m.	Hazard Characterization of Non-Cancer Effects	Drs. Balmes, <u>Bonner</u> , <u>Redlich</u>
	Reference Concentration	Drs. <u>Kriebel</u> , <u>Sheppard</u> , Webber
12:00 - 1:00 p.m.	<b>Lunch</b>	
1:00 – 2:00 p.m.	Hazard Characterization of Cancer Weight-of- Evidence	Drs. Everitt, <u>Lippmann</u> , <u>Neuberger</u> , Walker
	Inhalation Unit Risk	Drs. Ferson, <u>Pennell</u> , Peto, <u>Salmon</u>
2:00 – 2:30 p.m.	<b>Summary and Next Steps</b>	Dr. Agnes Kane, Chair
2:30 p.m.	<b>Adjourn</b>	Dr. Diana Wong, Designated Federal Officer