

**U.S. Environmental Protection Agency
All Ages Lead Model (AALM) ad hoc Review Panel
Public Meeting
Crystal Gateway Marriott
1700 Richmond Highway
Arlington, VA 22202**

AGENDA

Purpose: All Ages Lead Model (AALM) Review Panel will peer review the AALM Version 2.0. The review materials comprising AALM Version 2.0 are the External Review Draft of the:

- 1) *Technical Documentation*
- 2) *Users Guide for the FORTRAN Version of the All-Ages Lead Model (April 2019)*
- 3) *The AALM Version 2.0 Software*

Thursday October 17, 2019

9:00 - 9:15 a.m.	Convene Meeting	Ms. Iris Goodman Designated Federal Officer
	Welcoming Remarks	Mr. Thomas Brennan, Director, EPA Science Advisory Board Staff Office
	Purpose of the Meeting and Review of Agenda	Dr. Hugh Barton, Chair
9:15 - 10:00 a.m.	EPA Presentation the AALM Version 2.0 Review documents	Dr. James Brown EPA National Center for Environmental Assessment
10:00 - 10:20 a.m.	Public Comments	Members of the Public (Speakers Registered in Advance)
10:20 - 10:30 a.m.	Break	
10:30 - 10:50 a.m.	Review of the AALM Version 2.0 Charge Questions	Dr. Barton and Panel Members
10:50 a.m. - 12:15 p.m.	Discussion of the Panel's Responses to the AALM Version 2.0 Charge Questions	Dr Barton facilitate

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| 1. Are the features of the AALM adequately described in the “Technical Support Document for the AALM”? | Lead: Dr. Loccisano, with all panelists contributing |
| 2. Are the model features supported by available research findings in published peer-reviewed literature or by reasonable extrapolations from such findings? | Lead Discussants:
Dr Cory-Slechta, Dr. Kosnett, Dr. Marcus |

12:15 - 1:30 p.m.

Lunch

1:30 - 3:30 p.m.

Discussion of the Panel’s Responses to the Charge Questions (continued)

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| 3. In general, is the theoretical basis for the model adequately described in Chapter 2 (Theoretical Framework, Parameters, and Equations)? | Lead Discussants: Dr. Weitzman, Dr. Cory-Slechta, Dr. Phalen |
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Please comment on the discussion of the following specifics regarding AALM:

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| a. Are the values specified for the intake rates as a function of age for different media adequately described? | Lead Discussants: Dr. Goodrum, Dr. Cohen |
| b. Are the uptake/absorption parameters and parameters requiring modification for specific routes of exposure adequately described? | Lead Discussants: Dr. Vork , Dr. Loccisano, Dr. von Lindern, |
| c. Are the biokinetic parameters describing lead distribution and elimination adequately described? | Lead Discussants: Dr. Cohen, Dr. Pessah, Dr.Vork |

Additionally, please comment on any strengths or weaknesses in the justification provided for model assumptions (data inputs, methodology, etc.) and the quantitative impact of those assumptions on the model and its results.

Lead Discussants: Dr. Clewell, Dr. Cory-Slechta, Dr. Phalen

3:30 - 3:45 p.m.

Break

3:45 - 5:15 p.m.

Discussion of the Panel’s Responses to the Charge Questions (continued)

4. What are the Panel’s views of *Chapter 3: Evaluation and Development of AALM.FOR*) with regard to:

a. The predictive accuracy and reliability of the AALM based on comparisons to available data sets.

Lead Discussants: Dr. Goodrum, Dr. Clewell, Dr. Cohen, Dr. Weitzman

b. The extent to which the computer code implementing the model has been adequately verified and is operating as expected, based on the results comparing model predictions between applications of the AALM implemented in distinctly differing platforms.

Lead Discussants: Dr Martin, Dr Vork

c. The availability of other datasets that may be useful for further model evaluation.

Lead Discussants: Dr. Martin, All panelists, Chair to facilitate discussion

5:15 p.m.

Recess for the Day

Friday, October 18, 2019

8:00 a.m.- 8:15 a.m.

Reconvene

Ms. Iris Goodman
Designated Federal Officer

8:15 - 8:30 a.m.

Panel Chair Observations

Dr. Hugh Barton, Chair

8:30 a.m. - 10:30 a.m.

Discussion of the Panel’s Responses to the Charge Questions (continued)

5. Is the *AALM Fortran Users Guide* sufficiently clear and useful in providing “user friendly” instructions for carrying out model runs for AALM applications? How might the AALM user’s manual be improved?

Lead Discussants: Dr.von Lindern, Dr. Clewell, Dr Martin

	6. How could specific features of the AALM be further refined to improve its predictive accuracy?	Lead Discussant: Dr Phalen, Dr Marcus,
	7. How could specific features of the AALM be further refined to make it more user- friendly?	Lead Discussant: Dr. Barton, Dr Goodrum
10:15 - 10:30 a.m.	Break	
10:30 a.m. - 12:00 p.m.	Discussion of the Panel's Responses to the Charge Questions (continued)	
	8. Is the AALM consistent with the Agency's Regulatory Environmental Model Guidance found at URL:http://cfpub.epa.gov/crem/ ?	Lead Discussants: Dr. Loccisano, Dr. Kosnett, Dr. von Lindern
	9. What additional information (if any) about AALM might be useful to users who want to assess a hypothetical or real-world risk assessment problem, in order to facilitate the correct application of the model and to communicate its modeling outcomes correctly and efficiently?	Lead Discussants: Dr. Kosnett, Dr. Weitzman
12:00 - 1:00 p.m.	Lunch	
1:00 - 1:15 p.m.	Brief Clarifying Comments from Members of the Public	<u>Speakers Registered in Advance</u>
1:00 - 2:15 p.m.	Discussion of the Charge Questions	Panel (as needed)
2:15 - 3:15 p.m.	Summary of Major Findings and Recommendations on the AALMS Review	Question writing Leaders, Facilitated by Panel Chair
3:15 - 3:30 p.m.	Summary and Next Steps	Dr. Barton
3:30 p.m.	Adjourn	MS Goodman

