Message

From: Bussard, David [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CF26B876393E44F38BDD06DB02DBBFE5-BUSSARD, DAVID]
Sent: 11/16/2018 9:49:32 PM
To: Raffaele, Kathleen [raffaele.kathleen@epa.gov]
Subject: FW: Additivity Paper
Attachments: Bussard review of revisions 2018-11-16.docx; Additivity Report 11-5-18 Comparison of RAF Review Version 10-29-18 with RAF Comments 7-6-18 (002)_DBnotes.docx

Kathy,

I would welcome your insight as to audience. I could be wrong. But, much of this strikes me as somewhat academic and potentially confusing to those assessors closer to field decisions – even if perhaps very useful to start to expand thinking about AOPs as networks that can converge.

David

My note to Glen is below:

> My greatest concern, and one that is perhaps best handled with a discussion amongst the reviewers, is the audience for this paper. Kathy Raffaele may tell me I am wrong, but it seems to me many "risk assessors" who are evaluating a specific waste site or a specific scenario of some other type are not going to be looking in detail at dose-response curves and AOPs. It seems like this discussion is useful for academics, and for those in EPA who develop RfVs or cancer potency factors and decide to provide advice for those addressing a common mixture issue, such as "PCBs" or "PAHs".... Thus, those in NCEA and those in OPP (or perhaps OPPTS where they are evaluating a mixture rather than a single chemical) who are looking at toxicology datasets. If others have the same impression, I think there are a number of places it would be useful to make that clear.

From: Bussard, David
Sent: Friday, November 16, 2018 4:46 PM
To: Rice, Glenn <rice.glenn@epa.gov>; Martin, Lawrence (Martin.Lawrence@epa.gov) <Martin.Lawrence@epa.gov>
Subject: RE: Additivity Paper

Actually, resending in case I had not hit "save" before attaching the files.

David

> **From:** Bussard, David
> **Sent:** Friday, November 16, 2018 4:45 PM
> **To:** Rice, Glenn <rice.glenn@epa.gov>; Martin, Lawrence (Martin.Lawrence@epa.gov) <Martin.Lawrence@epa.gov>
> **Subject:** Additivity Paper
>
> Glenn,
>
> Thank you and your team for the revisions. Many of my points re clarity have been addressed.

Attached is my assessment of the revisions. There are some places where revisions were made, but still seem to me are unclear, or could at least be clearer. But, they are not live or die issues. See attached.

My greatest concern, and one that is perhaps best handled with a discussion amongst the reviewers, is the audience for this paper. Kathy Raffaele may tell me I am wrong, but it seems to me many "risk assessors" who are evaluating a specific waste site or a specific scenario of some other type are not going to be looking in detail at dose-response curves and AOPs. It seems like this discussion is useful for academics, and for those in EPA who develop RfVs or cancer potency factors and decide to provide advice for those addressing a common mixture issue, such as "PCBs" or "PAHs".... Thus, those in NCEA and those in OPP (or perhaps OPPTS where they are evaluating a mixture rather than a single chemical) who are looking at toxicology datasets. If others have the same impression, I think there are a number of places it would be useful to make that clear.

Thank you for your revisions. Attached is my summary and also the mark-up with notes on the comments I made.

David A. Bussard

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