From: POULSEN Mike
To: Eric Blischke/R10/USEPA/US@EPA
Cc: LavelleJM@cdm.com; ANDERSON Jim M
Subject: RE: Background Evaluation
Date: 07/21/2008 05:43 PM

Eric -

I didn't think I needed to comment on the LWG's background evaluation beyond what you had said, but after looking over Jim's evaluation, I do have an issue. I mentioned at our last meeting that we might need to pay attention to the Aroclors making up the total, but I didn't think it would be very important. Now I see that Jim reaches a different conclusion regarding outliers looking at Aroclor 1254 than the LWG does looking at total Aroclors. After looking more closely at the data, I think we need to develop background values for 1254 and 1260 separately. Aroclors 1248, 1242, 1232, and 1016 were each detected only once, so I would call those outliers, and say that background for those Aroclors is the detection limit.

I'm not sure if we later sum the 1254 and 1260 background values to get a total Aroclor background. I don't know if that will mean much. Also note that the LWG is developing PRGs in tissue for the individual Aroclors.

- Mike

p.s. If you do File/Remove Hidden Data you can get Jim's Word file down to 55 KB.

-----Original Message-----
From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Thursday, July 17, 2008 4:42 PM
To: Shephard.Burt@epamail.epa.gov; Humphrey.Chip@epamail.epa.gov; Davoli.Dana@epamail.epa.gov; GAINER Tom; Grepo-Grove.Gina@epamail.epa.gov; PETERSON Jenn L; jeremy_buck@fws.gov; ANDERSON Jim M; Goulet.Joe@epamail.epa.gov; Smith.Judy@epamail.epa.gov; Koch.Kristine@epamail.epa.gov; MCCLINCY Matt; POULSEN Mike; Fuentes.Rene@epamail.epa.gov; Robert.Neely@noaa.gov; Sheldrake.Sean@epamail.epa.gov; tomd@ctsi.nsn.us; csmith@parametrix.com; rgensemer@parametrix.com; rose@yakama.com; erin.madden@gmail.com; jay.field@noaa.gov; Cora.Lori@epamail.epa.gov; Ader.Mark@epamail.epa.gov; BBarquin@hk-law.com; audiehuber@ctuir.com; Lisa.Bluelake@grandronde.org; sheila@ridolfi.com; Benjamin Shorr; LavelleJM@cdm.com; Mary.Baker@noaa.gov; Michael.Karnosh@grandronde.org; FARRER David G; dallen@stratusconsulting.com; jpeers@stratusconsulting.com; (b) (6) Bob Dexter; cunninghame@gorge.net; JMalek@parametrix.com; nancy.munn@noaa.gov
Subject: Background Evaluation

The LWG developed a background proposal on July 3, 2008. The purpose of the proposal was to present an approach for evaluating upstream sediment data for selected chemicals. This approach will be used to develop background estimates for bedded sediments to be presented in the draft RI Report. EPA and the LWG had previously agreed on the various uses of background (six different uses were agreed to: PRG development, risk characterization, development of remediation goals and AOPCs (hill topping replacement values), criteria for assessing long-term monitoring, evaluation of potential capping material, and possibly recontamination evaluation).

In general, the LWG followed the approaches outlined in ProUCL 4.0. However, the LWG felt that statistical outliers should not be automatically eliminated from the data set because they may be representative of the background population and that best professional judgement should be applied to determine whether statistical outliers should be eliminated. Our position was that statistical outliers may be indicative of sources of contamination that are inappropriate to be included in the background estimates. However, we agreed to review the LWG's best professional judgement approach.

The LWG developed both potential and primary outliers. Primary outliers were those chemicals that exceeded the average background concentration by approximately 10X. Potential outliers were statistical outliers.

The LWG proposed to eliminate primary outliers but retain potential outliers.

My position is that potential outliers should be evaluated on a geographic basis. Potential outliers that are clustered together should be eliminated from the background data set. Potential outliers that are distributed geographically may be retained. This approach results in the elimination of the 4 potential total PCB outliers (all collected between RM 16 and 17) and two potential total DDT outliers (all collected at RM 23).

Please provide comments on the background approach by COB Monday. I plan on providing direction to the LWG on this topic by COB Tuesday. Please let me know if you would like Jim Lavelle's latest memo. Due to its large size, I do not want to just sent it to everyone.

Thanks, Eric