From:	Robert Law
To:	LaPoma, Jennifer
Cc:	Willard Potter; Vaughn, Stephanie; Mike Barbara; William Hyatt; Lisa Saban
Subject:	17-mile BERA
Date:	Tuesday, February 02, 2016 1:20:34 PM
Attachments:	20160202 Conf Call 1.13.16 EPA Summary Re EPAs 12.22.15 BERA RTCs rev by CPG docx.docx 20160128 Sed and SFF sample locations in described mudflats by reach to R2.pdf 20160128 Large fish sample locations and individual mudflats to R2.pdf 20160128 Freshwater fish sample locations and individual mudflats to R2.pdf

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Jennifer:

Comment 2 Follow-up Response - Maps of the biological samples and mudflats are attached.

Comment 98 Follow-up Response - When the CPG calculated the mean, the final result was rounded based on the minimum number of significant figures reported for that dataset pursuant to the Region 2-approved *Data Usability and Data Evaluation Plan for the Lower Passaic River Study Area Risk Assessments.*

For example, the mudflat dataset for chromium includes a concentration of **300 mg/kg** (LRC SSP, 12A-0459-C3AS), which has one verifiable significant figure. This is the least precise value in the dataset, so we applied one significant figure, resulting in a mean of 100 mg/kg. Region 2 applied two significant figures, resulting in a mean of 120 mg/kg.

Similarly, the LPRSA = RM 6 dataset for copper includes a concentration of **400 mg/kg** (LRC SSP, 12A-0468-C2AS), which has one verifiable significant figure. This is the least precise value in the dataset, so we applied one significant figure, resulting in a mean of 100 mg/kg. It appears that Region 2 applied two significant figures, resulting in a mean of 130 mg/kg.

The sample concentrations cited above account for all six of the discrepancies noted in comment 98.

The determination of significant figures was based on a script that identifies verifiable significant figures for any concentration. For the chromium example above, the two zeroes following the three (300) were indeterminate, and a conservative significant figure of one was applied. It appears Region 2 assumed two significant figures for this value.

It should be clarified that only basic statistics such as means were calculated using the initial, conservative assessment of significant figures. When calculating EPCs for the risk assessment, further evaluation of the precision of these concentrations resulted in UCLs rounded to at least two significant figures.

Comment 95 - The CPG is awaiting feedback from Region 2 on Response to Comment 95.

Attached are the CPG's revisions and clarifications to the Region's 1/13/16 call notes.

Please contact me with any questions and comments.

Thank you.

R/

Rob

Robert Law, Ph.D.
de maximis, inc.
rlaw@demaximis.com
Voice: 908-735-9315
Fax: 908-735-2132