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MCRD PARRIS ISLAND
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EMAIL REGARDING U S EPA REGION IV COMMENTS ON POND SEDIMENT MERCURY CONCENTRATIONS AT SITE 3 CAUSEWAY LANDFILL MCRD PARRIS ISLAND SC
3/11/2009
U S EPA REGION IV

From: Llamas.Lila@epamail.epa.gov
To: Sladic, Mark
Cc: Cook, Charles CIV NAVFAC SE; Zimmerman, Greg
Subject: Re: Parris Island Site 3 sediment /background
Date: Wednesday, March 11, 2009 4:52:30 PM

I think we have a nomenclature problem here. When I spoke with you this morning this is exactly what I said. The background number you are referencing as barely being exceeded is already 2xs the mean value from the background data set. And you have exceeded 2xs the mean. So we are saying the same thing. However, I am not sure how this gives us a risk management opportunity. Anything exceeding 2xs the mean background must be carried forward.

But I am open to hearing what leeway you think this gives us. Maybe i am missing a point.

Lila

"Sladic, Mark" <Mark.Sladic@tetratech.com> 03/11/2009 03:33 PM

To: Lila Llamas/R4/USEPA/US@EPA
cc: "Cook, Charles CIV NAVFAC SE" <charles.cook2@navy.mil>, "Zimmerman, Greg" <Greg.Zimmerman@tetratech.com>
Subject: Parris Island Site 3 sediment /background

Lila - I went for clarification on our earlier discussion about whether our pond sediment concentrations were actually just in excess of background, or exceeded 2X background. Here's what I got:

We determined the mean value for our background set. Per EPA guidance, that mean value is multiplied by two, to provide a background concentration. For Site 3, the mean mercury value is about 0.045 mg/kg, so our background mercury value is 0.09 mg/kg. The average value of the pond sediment concentrations is 0.118 mg/kg, which is slightly greater than 0.09 mg/kg. The average value of all sediment samples (pond side and marsh side) is 0.087 mg/kg which is less than 0.09 mg/kg, which is why in the latest version of the Ecological Risk Assessment, mercury was eliminated from requiring food chain modeling.

Therefore, my statement that mercury was just over background concentrations is accurate, while the statement that we exceed 2X background is not. Maybe this provides a risk management opportunity to make a decision that may not have previously been apparent.

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