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MCRD PARRIS ISLAND
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EMAIL REGARDING DRAFT WORK PLAN FOR FISH TISSUE SAMPLING AT THIRD
BATTALION POND AT SITE 3 CAUSEWAY LANDFILL MCRD PARRIS ISLAND SC
2/27/2009
TETRA TECH NUS

From: [Sladic, Mark](#)
To: [Meredith Amick](#)
Cc: [Zimmerman, Greg](#); [Churchill, Peggy](#)
Subject: RE: Correction: State Ichthyologist Information
Date: Friday, February 27, 2009 11:47:01 AM

Hi Meredith. We're starting our draft work plan for the tissue sampling. Therefore, with respect to your earlier replies (below):

- (1) sampling similar to Bureau of Water protocol is recommended. Can you please provide the protocol (or a web link, or whatever).
- (2) Does DHEC have a preferred laboratory/ preferred lab procedure that the Agency would want to identify?

We may follow up with additional questions as this proceeds.

Thanks. MS

-----Original Message-----

From: Meredith Amick [<mailto:AmickMS@dhec.sc.gov>]
Sent: Monday, February 09, 2009 10:27 AM
To: Sommer Streett; Priscilla Wendt; Llamas.Lila@epa.gov; Charles Cook; tom Dillon@noaa.gov; MacMcRae; Sladic, Mark; Heber Pittman; Timothy Harrington
Cc: Susan Byrd; Annie Gerry; Bernhardt, Aaron; Jupin, Bob; Zimmerman, Greg
Subject: RE: Correction: State Ichthyologist Information

Hey Mark,

Below are some of the answers to the questions that you asked.

1. Based on discussions with the state ichthyologist, fish would be more conservative to sample because shrimp are unlikely to bioaccumulate contaminants. He recommended sampling for flounder and/or mullet because these would be the most conservative representative fish.
2. We would recommend sampling similar to DHEC BOW protocol. As far as whole vs. fillet, BOW samples fillets.
3. Metals would be required based on COPCs and PCBs would be required based on original fish tissue results.
4. As far as a workplan goes, the state would be willing to accept a simple letter workplan. However, the Navy needs to decide if a UFP SAP is required. In any case we recommend following BOW protocol.
5. DHEC would like raw sample results in a table showing detections or non detections and their corresponding detection limits.

We can get more specific information from the BOW about their sampling protocol (where they sample, background sample, representative sample(s), detection limits, etc) and then discuss this information on a conference call.

If we have a work plan before the March meeting, this would help direct conversation. Either way, if we are in Columbia the team could directly ask DHEC BOW any questions that may arise.

Meredith

>>> "Sladic, Mark" <Mark.Sladic@ttemi.com> 2/5/2009 12:22 PM >>>

Hi Meredith. Per your generous offer, I do have a couple questions. Thanks for the opportunity to ask.

The information I get from my risk assessors is that the sediment uptake modeling resulting from our

interview interpretations currently indicates a no-unacceptable risk situation. Therefore, while being sensitive to the State's needs, we don't believe that we can completely define the data gap perceived by the State that is driving the State's request for sampling and, therefore, how to proceed appropriately. Any insight on the following questions will help. Thanks.

- 1) What fish species does the SCDHEC recommend collecting? Fish only, or shellfish, squid, etc.?
- 2) For fish (and other species, as appropriate), does the State provide any guidance on what constitutes a representative sample (age/size of fish, fillet/whole fish, etc.)
- 3) What analytical fractions are required. Based on our post-remedy sediment analyses, we would suggest that only specific compounds from the inorganics analytical fraction are necessary. However, based on yesterday's conference call, we do not believe this is a consensus opinion. If possible, please identify other required analytical fractions with a brief rationale.
- 4) What are SCDHEC's requirements for a workplan, prior to collection of samples and analysis. Does the State provide specific minimum detection limit requirements, or are standard analytical MDL's appropriate. Are there any QA requirements.
- 5) What type of reporting format is appropriate for the State's use. It appears that raw sample results might meet the State's requirements, however, if Navy proceeds, it is possible that multiple locations at 3rd BTN pond might be sampled, including at opposite ends of the pond from the causeway location. In addition, off-site control/background sampling may be used. Will SCDHEC require an analysis of all results as they compare/contrast to results collected at the causeway, or will simple clearly-labeled data summary tables be sufficient.

We can make proposals to address any or all of the items above, however, if SCDHEC already has specific requirements in mind, this would expedite the process. We'd be happy to discuss the above on a conference call, if this is any more convenient. Thanks.

Mark Sladic, P.E.
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-----Original Message-----

From: Meredith Amick [<mailto:amickms@dhec.sc.gov>]

Sent: Thursday, February 05, 2009 11:39 AM

To: Sommer Streett; Priscilla Wendt; Llamas.Lila@epa.gov; Charles Cook; tom Dillon@noaa.gov; Mac McRae; Sladic, Mark; Heber Pittman; Timothy Harrington

Cc: Meredith Amick

Subject: Correction: State Ichthyologist Information

Hi team,

I just got some additional clarification. Please ignore the initial information.

I talked with the state ichthyologist to clarify what he would do with the fish tissue data from Site 3 collected by the Navy. As he does with all fish tissue data that he receives, he would compare the data to estuaries along the coast and to EPA fish tissue criteria. Additionally the BOW already has risked based screening values for this area that they compare fish tissue samples to, in order to determine if the fish is safe to be eaten once a week, once a month, never, etc. These risked based screening values are back calculated from a conservative risk assessment based on consumption of everyday, once a week, once a month, etc.

I will use the information based on consumption of fish everyday from the pond at Site 3 as a weight of evidence to make a determination about the need to communicate back to the fisherwoman.

Other clarification I got is as follows: the state would not post based on data collected during this fish

tissue sampling effort alone. If the data comes back above EPA fish tissue criteria then DHEC would go out and collect fish tissue samples on a reoccurring basis. Then in order for the water body to meet the state posting criteria, 3 years of data would be needed. The criteria are situational; however, the state postings are more conservative than the EPA because SC bases their postings on pregnant women and children.

Please let me know if you have questions.
Meredith