EMAIL OF TRANSMITTAL AND SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL COMMENTS ON PRELIMINARY DATA SUMMARY FOR SITE 14 STORM SEWER OUTFALLS MCRD PARRIS ISLAND SC

7/24/2009

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

From:	Meredith Amick
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Subject:	Site 14 Preliminary Data Summary Comments
Date:	Friday, July 24, 2009 12:19:36 PM
Attachments:	Site 14 comments.doc

Hi team,

Attached are my formal comments. I will send them out hard copy on Monday, but I wanted to go ahead and get them out to the team before the weekend.

Let me know if you have questions. Have a great weekend.
Meredith

The Department does not expect to receive a revised version of the Preliminary Data Summary; however, these comments should be addressed in the UFP-SAP for Site 14 outfall sampling.

1. Based on team discussions, the Department understands the objective of the investigation at Site 14 to be determining the impact of historical releases through Site 14 on the marsh. Additionally the team has discussed in team meetings the use of sediment sampling to meet this objective; however, the Preliminary Data Summary does not indicate which type of sampling will be used during this investigation. After consulting with other project managers at the Department about similar investigations at bases across South Carolina, the following information was discovered:

   Based on research conducted by the Navy and approved by the Department and EPA at the Charleston Naval Complex (CNC), it was determined that sediment analysis would not be conclusive regarding overland runoff through storm drainage systems to the nearest water body from historical releases. The CNC team concluded that sediment and soil particulates are tidally influenced and dispersed from outside of the evaluated drainage basin due to bulldozing, wind dispersion, etc. Extensive research regarding sediment dispersion was presented by Dr. Ivan Chow, which showed that sediments at the storm outfalls at the Naval Complex were "traced" back several miles downgradient of the base.

   Therefore, the Department recommends (similar to the approach at the Naval Complex) that **surface water** samples be collected from within the outfall pipe during a period of heavy rainfall. If an outfall is tidally influenced, samples should be collected during the outgoing tide. Surface water sampling is an indication of current contamination migration from within the distinct drainage basins. Due to PAH residuals from road runoff and parking lots, it is also recommended that "control" samples from non-site related asphalt parking lots or roads be included in the evaluation in order to specifically identify site related contamination.

2. It was the Department's understanding that Elliot's Beach OWS was to be addressed with Site 14; however this document provides no mention of the OWS. Please clarify.

3. The Site 14 outfalls were categorized into 3 different groups depending on the areas that they drained. Due to the limited definition of Process Units, the Department does not concur with the rationale for eliminating outfalls from sampling. Based on the outcome of the discussion of Comment #1, Comment #3 will need to be revisited.

4. From the information presented both in team meetings and this document, the Department is unclear about the definition of Site 14. In team meetings there has been discussion of both an "old" and "new" storm sewer system at MCRD PI. Please clarify which system is included in the investigation of Site 14. The work plan for this investigation should include printed maps of Site 14.

5. The Department will need to see further discussion about Outfalls 881 and 886 in order to agree with the proposal of no sampling based on not finding the outfalls.

6. Please clarify the statement “Outfalls deemed too far from a drain to affect it were eliminated from sampling.”

7. Please provide more discussion on the following statement, “Outfalls discharging to a manhole were eliminated from sampling.”

8. Additionally please provide more information on removing outfalls from the sampling plan based on only draining from “one side of the road to another.”

9. Based on the review of the SWMU 54 SAR, further investigation of this site is required. After team meeting discussions, the Department understood that the additional sampling at Site 54 would be included in the Site 14 investigation. Please include the sampling of this outfall in the work plan.

10. The Department does not understand the listing of one outfall that cannot be found at Site 45. At least one outfall has been found and sampled by USGS. Additionally in presentations by USGS (see page 4 of the January 2009 slide print out), it was noted that an old storm sewer outfall was found crushed very near a newer storm sewer outfall. Additionally after USGS investigation it was discovered that contaminants flowing out of the newer storm sewer outfall and during high tide were flushing from the newer storm sewer outfall to the old outfall. Please clarify if the missing outfall is the one identified by USGS. Additionally the Department believes that the sampling of these outfalls should be included with the investigation of Site 45 not Site 14.