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MINUTES FROM 22 JANUARY 2008 TECHNICAL REVIEW COMMITTEE MEETING WITH  
TRANSMITTAL EMAIL MCRD PARRIS ISLAND SC  
2/11/2008  
U S EPA REGION IV

**From:** [Koroma-Llamas.Lila@epamail.epa.gov](mailto:Koroma-Llamas.Lila@epamail.epa.gov)  
**To:** [charles.cook2@navy.mil](mailto:charles.cook2@navy.mil); [art.sanford@navy.mil](mailto:art.sanford@navy.mil); [koroma-llamas.lila@epa.gov](mailto:koroma-llamas.lila@epa.gov); [Sladic, Mark](#);  
[timothy.j.harrington@usmc.mil](mailto:timothy.j.harrington@usmc.mil); [mmcrae@TechLawInc.com](mailto:mmcrae@TechLawInc.com); [AmickMS@dhec.sc.gov](mailto:AmickMS@dhec.sc.gov); [darrel.pittman@usmc.mil](mailto:darrel.pittman@usmc.mil);  
[bowersjb@dhec.sc.gov](mailto:bowersjb@dhec.sc.gov); [Kelly.Taylor2@ch2m.com](mailto:Kelly.Taylor2@ch2m.com); [barkerjs@dhec.sc.gov](mailto:barkerjs@dhec.sc.gov); [kraemerd@tampabay.rr.com](mailto:kraemerd@tampabay.rr.com);  
[wendtp@dnr.sc.gov](mailto:wendtp@dnr.sc.gov); [tom.dillon@noaa.gov](mailto:tom.dillon@noaa.gov); [vroblesk@usgs.gov](mailto:vroblesk@usgs.gov)  
**Subject:** Technical Review Committee (TRC) Meeting Summary, January 22, 2008  
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**Attachments:** [MCRD PI TRC Jan08.doc](#)

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FYI. TRC Meeting Minutes for your use.

(See attached file: MCRD PI TRC\_Jan08.doc)

**MCRD PARRIS ISLAND**  
**TECHNICAL REVIEW COMMITTEE (TRC) MEETING SUMMARY**  
**January 22, 2008**  
**MCRD PARRIS ISLAND, SOUTH CAROLINA**

**ATTENDEES**

Tim Harrington (MCRD PI)  
Heber Pittman (MCRD, PI)  
Lila Llamas (US EPA)  
Meredith Amick (SCDHEC)  
Sommer Barker (SCDHEC)  
Joe Bowers (SCDHEC)  
Charles Cook (NAVFAC)  
Art Sanford (NAVFAC)  
Mac McRae (TechLaw)  
Mark Sladic (Tetra Tech)  
Dennis Forsythe (TRC Community member)  
Al Segars (TRC Community member)  
Allen Warren (USC, Beaufort)

Mr. Tim Harrington welcomed all attendees and a round of attendee introductions proceeded. The TRC presentation provided an update on the "Range Environmental Vulnerability Assessment (REVA)" currently being conducted at the active ranges on the Marine Corps Recruit Depot (MCRD) Parris Island (Depot). REVA will provide a snapshot of environmental conditions of the operational ranges, a detailed assessment of potential migration off range, and valuable information for long-term sustainment strategies. Under REVA lead is also assessed. However, the dissolution rates reflective of the fate and transport of lead from bullets have not been established with any degree of certainty in the scientific community. Therefore, small arms ranges are *only* qualitatively assessed. As such, Dr. Alan Warren from the University of South Carolina, Beaufort, will conduct a chemical analysis evaluation and Dr. Paul Work with the Georgia Institute of Technology, will conduct the sediment transport study with respect to lead at the small arms ranges at the Depot. It was noted that the ranges at the Depot are not homogenous and that they include wetlands and tidal creeks. The chemical analysis will evaluate the boundaries of the ranges.

Mr. Harrington stated the Depot is currently reporting under EPCRA requirements the release of approximately 60,000 pounds of lead and 20,000 pounds of copper. The rifle ranges have been active approximately 90 years averaging about 12 million rounds of ammunition fired per year. During a recent sediment sampling event, samples were collected from 30 locations within the tidal zone of the rifle range zone. The samples were collected starting from behind the targets and at 75 yard intervals along the range zone. The TRC asked what area within the rifle range was sampled. The samples were collected from a depth of approximately two to three feet below grade level and examined for the presence of lead projectiles. Although some projectile fragments were found on the surface of the marsh, only two whole projectiles were found in

sediments collected from the sampling 30 locations. Mr. Harrington indicated that the laboratory analytical results on the sediment samples have not yet been completed.

The TRC asked what the condition of the projectiles that were found was. Dr. Warren indicated that the two projectiles that were found were in good condition at depth in the marsh "pluff" mud. Dr. Warren indicated that the next sampling effort would be conducted in early February 2008. It is possible that the previous sampling depth was too shallow and deeper depths will be sampled in the next round. The TRC indicated that maybe the sampling is being conducted in the wrong areas. Mr. Harrington indicated that the sample locations were biased based on comparison of rifle ranges at the Marine Corps Base Camp Lejeune. Mr. Harrington stated that the sediments from the bottom of the creeks have not yet been sampled. Also, samples have not been collected north of Archer's Creek.

Dr. Warren discussed that Georgia Tech is currently building a pontoon boat mounted vibratory core sediment sampling system which will be utilized to collect sediment samples from the creek bottoms. The TRC asked if copper and lead concentrations in sediment would be compared to Port Royal concentrations. Dr. Warren indicated the copper and lead results as well results for four other heavy metals constituents found in the projectiles will be compared with control sites. The TRC asked what the path forward would be if the results are comparatively high. Mr. Harrington stated that monitoring may be initiated.

Dr. Warren discussed that sediment samples will be collected from the 0-6-inch, 6-12-inch and the 12-24 inch depths and submitted for XRF laboratory analysis. Horizontal and vertical profiles of the sediment results will be prepared. Future field screening activities utilizing XRF is planned. Dr. Warren indicated the vibracore sampling device would be on-site in mid February. The sediment analytical data will be utilized to drive the path forward.

The TRC asked if any sediment sample would be collected from Horse Island. Mr. Harrington indicated that sampling would occur only in the impact area of the range. The range impact area can be safely seen from the location of the inert disposal landfill located on the Depot.

**END**