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MCRD PARRIS ISLAND  
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LETTER REGARDING SOUTH CAROLINA DEPARTMENT OF HEALTH AND  
ENVIRONMENTAL CONTROL COMMENTS ON THE SAMPLING AND ANALYSIS PLAN  
ADDENDUM AND U S NAVY RESPONSES TO COMMENTS ON THE BASELINE SAMPLING  
AND ASSESSMENT REPORT FOR THE DEPOT GAS STATION MCRD PARRIS ISLA  
6/25/2013  
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

June 25, 2013

Commanding Officer  
NAVFAC Southeast  
ATTN: Mr. Dan Owens  
PO Box 30  
Ajax Street North, Bldg 135  
Jacksonville, Florida 32212

and

Commanding General  
NREAO  
ATTN: Mr. Tim Harrington  
PO Box 5028  
Parris Island, SC 29905

RE: Comments to

- Depot Gas Station RTCs and Change Pages to Baseline Sampling and Assessment Report
- Sampling and Analysis Plan Addendum for Depot Gas Station

Marine Corp Recruit Depot (MCRD)  
Parris Island  
SC6 170 022 762

Dear Mr. Owens and Mr. Harrington:

The Division of Waste Management of the South Carolina Department of Health and Environmental Control (Department) completed the review of the above reports received May 1, 2013. Based on this review the Department has the following comments.

The Department understands that the comments to the RTCs will result in Change Pages to the Baseline Sampling and Assessment Report. Additionally the work listed in the Sampling and Analysis Plan Addendum has already been done. Therefore we will comment on the work that has been completed in the upcoming Addendum Report.

The Department's review is based on the information presented by MCRD to date; any information found to be contradictory may require further action. If you have any questions regarding this issue, please contact me at (803) 898-0368.

Sincerely,

A handwritten signature in black ink, appearing to read 'Meredith Amick', with a long horizontal line extending to the right.

Meredith Amick, P.E., Environmental Engineer  
DOD Corrective Action Section  
Division of Waste Management

cc:

Russell Berry, EQC Region 8, Beaufort  
Annie Gerry, Hydrogeology

Peggy Churchill, TtNUS

Engineering Memo  
Prepared by Meredith Amick  
Marine Corp Recruit Depot (MCRD)  
June 14, 2013

1. Please ensure that this site is listed on the Base GIS and Base Master Plan as an environmental site with soil and groundwater contamination.
2. Please discuss any future plans for the soil labeled "residual soil contamination" on the maps and discuss its impact on groundwater contamination.
3. Please discuss the contents and condition of the tank between Building 156A and Building 158A.



Catherine B. Templeton, Director

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## MEMORANDUM

**TO:** Meredith Amick, P.E.  
Department of Defense Corrective Action Section  
Division of Waste Management  
Bureau of Land and Waste Management

**FROM:** Annie M. Gerry, Hydrogeologist   
Department of Defense Corrective Action Section  
Division of Waste Management  
Bureau of Land and Waste Management

**DATE:** June 17, 2013

**RE:** Marine Corps Recruit Depot  
SC6 170 022 762

Review of **Response to Comments Dated October 21, 2011 Comments to Baseline Sampling and Assessment Report for Depot Gas Station (Building 170) SCDHEC Site ID #01386**, Marine Corps Recruit Depot (MCRD), Parris Island, South Carolina dated May 2013

Review of Sampling and Analysis Plan Addendum Depot Gas Station (**Building 170**) SCDHEC Site ID #01386, Marine Corps Recruit Depot (MCRD), Parris Island, South Carolina dated May 2013

The document referenced above has been reviewed with respect to the S.C. Pollution Control Act 48-1-10 and the Resource Conservation and Recovery Act (RCRA), and other appropriate guidance documents. The Depot Gas Station has been in service since the 1940s and formerly provided gasoline and diesel fuel to facility vehicles through two gasoline dispensers located at Building 170 and one diesel dispenser at the aboveground storage tanks (ASTs), all of which were removed in 2000. In 1983, approximately 97 gallons of fuel spilled near the vicinity of Building 170 due to a tank overflowing. Contaminated soil was removed but the exact details of the removal activities are not available.

Based on review of this document, the following comments have been generated.

### COMMENTS

1. It would be helpful if a plume map was generated that showed the extent of contamination at this site. Please submit a plume map in the next report submitted to the Department.
2. **Table 4-2 Contaminant Trends Depot Gas Station-** It is noted that there is an increase in concentrations at MW03 and MW05, which are part of the upgradient monitoring well network on the site. A discussion of this increase should be included in the next report.

3. **Response to Comment #2A**

**The Departments Original Comment-**

This section states that nine monitoring wells (MW -06, -10, -13, -15, -18, -26, -18D, -31D, and -32D) could not be located during the 2009 field activities and that these wells are assumed to have been apparently abandoned during a previous remedial action. The MCRD is reminded that prior approval must be obtained from the Department before monitoring wells are installed or abandoned.

*Navy Response: ....While wells 10, 13, 18, and 32D are presented on the figures, they were not located when the baseline sampling event was performed.*

The Department was unable to find any historical groundwater data on monitoring wells 10, 13, 18, and 32D. Please provide any groundwater data on these wells in the next report. In addition, once the Department reviews the new data from this recent sampling event that was performed, if monitoring wells 10, 13, 18, and 32D have been accidentally abandoned, then the Department may require these wells to be re-installed.

4. **Response to Comment #6C**

**The Departments Original Comment-**

In the third paragraph, it states that the current data set is not suitable for estimating cleanup time frames since concentrations have increased near the excavation area. In addition, the text also states that the 2009 data should be considered the new baseline concentration for these wells and recommends that two additional annual rounds of data be collected and used with the 2009 sampling around to be used to estimate cleanup time frames.

The Department disagrees with this proposal. Since groundwater samples were last collected at this site in 2009, the MCRD should conduct semi-annual monitoring in order to compile a more robust database. After this data is obtained, a more definitive estimation of the amount of time it will take to remediate this site can be made

*Navy Response: It is currently recommended that additional data be collected prior to implementation of a remediation pilot study. Following the pilot study, the site will be monitored for performance and to develop remediation time frame estimates....*

The Department was unaware that a Pilot Study would be performed. Once the Department reviews the new data from the recent sampling event, the Department will discuss with the team if a Pilot Study is needed.

If you have any questions regarding this memo, please contact me via email at [GerryAM@dhec.sc.gov](mailto:GerryAM@dhec.sc.gov) or by phone at (803) 898-0359.



Catherine B. Templeton, Director

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## MEMORANDUM

TO: Meredith Amick, P.E., Environmental Engineering Associate  
Department of Defense Corrective Action Section  
Division of Waste Management  
Bureau of Land and Waste Management

FROM: Kent Krieg, Risk Assessor  
Department of Defense Corrective Action Section  
Division of Waste Management  
Bureau of Land and Waste Management *KMK*

DATE: June 13, 2013

RE: Response to SCDHEC comments to Baseline Sampling and Assessment Report  
Depot Gas Station (Building 170) Site ID 01386  
May 2013

The above referenced document by TetraTech has been reviewed. The Department has the following risk related comments.

1. "The vapor intrusion pathway was evaluated because of the presence of benzene at a concentration...greater than the EPA MCL..." The Department believes that vapor intrusion screening should occur for any volatile chemicals of concern (CoC). Please include these other CoCs (i.e. ethylbenzene, toluene, MTBE, etc.) in vapor intrusion risk assessments in future reports.
2. The Department recommends that the construction of any buildings within the site boundary could present an unacceptable health risk from indoor air contamination caused by volatilization of groundwater CoCs. A construction plan should be submitted to and reviewed by the MCRD, Navy, and SCDHEC prior to initiating the work to verify this potential risk is properly discussed and protective measures taken, if warranted.
3. As a reminder, per USEPA risk guidance, sites where the estimated risk is between  $10^{-4}$  and  $10^{-6}$  (as stated in this document as the 'target risk range'), the need for active remediation or risk management is evaluated on a site-specific basis and is not automatically considered acceptable. No response is necessary.

If you need any further information, feel free to contact me at (803) 898-0255.