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SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
EVALUATION OF U S NAVY RESPONSES TO COMMENTS ON DRAFT SITE  
INSPECTION/CONFIRMATORY SAMPLING REPORT FOR SITES 4, 5, 7, 9, 13, 16, 27 AND  
35 MCRD PARRIS ISLAND SC

7/1/2002

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Evaluation of Response to SCDHEC Comments to the Draft CS/SI Site/SWMU4, Site/SWMU 5, Site/SWMU 7, Site9/SWMU8, Site 13C/SWMU 13, Site/SWMU 16, SWMU 27, and SWMU 35

**Response to General Comment #1**

MCRD should understand that the intent of the comment was to point out the fact that the sites were not fully delineated during the CS/SI phase. As outlined in the Bureau's Assessment and Remediation Criteria, the MCRD can choose to delineate the SWMUs based on residential screening levels (PRGs) or approved background levels. After fully delineating the site, a risk assessment (qualitative and/or quantitative) can be conducted to account for various exposure scenarios. Once COCs are identified, the MCRD can present weight of evidence to support their recommended final remedy. However, it is important to note that sites where an industrial level remediation is selected will require land use controls to assure that the exposure assumptions used to select the remedy remain consistent for the life of the remedy

It is important that the assessment is complete prior to conducting a risk assessment or recommending a final remedy for a site. During or after completion of the risk assessment it is appropriate to consider land use controls as a tool in making a risk management decision for a less than residential clean up. Certain exceptions have been made to allow a facility to assess a site to industrial screening levels (PRGs). This scenario was appropriate due to the fact that the area was historically heavily industrialized, the site is expected to remain industrial in the future due to past contamination, the site was within a larger area of contamination where a residential use restriction had already been placed. In this situation, industrial use restrictions are inherent during investigation and as a portion of the final remedy.

Due to the environmental setting, and relatively low levels of contamination throughout the MCRD, this type of exception is not applicable. Therefore, as mentioned above, the sites must be assessed to residential PRGs or an approved background level prior to making any determination regarding a site remedy. The response to this comment and all others should be revised accordingly.

**Response to General Comment #2**

The Department does not concur with the rationale that the recommended land use controls were not intended to serve as a final remedy for the site. However, the Department concurs that additional investigation is needed based on the results from the CS/SI sampling at SWMUs 4, 5, 7, 9, 16, 13, and soil removal at SWMU 27. The Department interprets "activities in support of clean closure" to be recommendation of further investigation.

- Site/SWMU 4- no analytical samples were taken around Hummock, which is indicated as a potential location of the fire-training pit. Though a reasonable approach for verifying any potential gross contamination, the lack of visual evidence is not sufficient evidence to justify no samples. Please indicate why no

samples were analyzed from this area to assess potential contamination. The background data used to eliminate COPCs was not approved by the Department for use at these sites. Please refer to Susan Byrd's evaluation of the response to risk assessment comments for further detail. Additionally, there is not rationale provided for not analyzing surface soil samples.

- Site/SWMU 5- The Department agrees with the recommendation for an RI/RFI. However, the discussions of industrial PRGs should be removed since they are not relevant to the decision to further investigate.
- Site/SWMU 7- The Department agrees with the recommendation for an extended CS/SI. This investigation should include a soils investigation to delineate the nature and extent of contamination. Additionally, the fate of the piping should be determined in the investigation.
- Site 13C/SWMU 13- The Department agrees with the recommendation for an extended CS/SI. However, the discussions of industrial PRGs should be removed since they are not relevant to the decision to further investigate.
- SWMU 27- In order for the Department to concur with a soil removal at this site, additional information is needed. The nature and extent of contamination (vertical and horizontal) should be delineated prior to or during a soil removal. The environmental setting at the site needs clarification. Specifically, a map detailing the paved versus non-paved areas should be provided. Additionally, please clarify why only a portion of the parade deck was investigated during the CS/SI.
- SWMU 35- The Department does not agree with the recommendation for no further action at this site. Since the site is an active DRMO there is potential for additional releases based on current operations. Therefore, the Department cannot make a no further action determination at this time. Typically, the Department defers a final decision on similar sites until the site operations cease, and the potential for additional release no longer exists. At that time the nature and extent of contamination is determined.

### **Response to General Comment 3**

See evaluation to General Comment #2

### **Response to Comment #4**

See evaluation to General Comment #2 regarding SWMU 7. Though a magnetic survey was not conducted to determine the location of the pipes, additional information is needed. Since the pipes were a part of the fire training activities, and the MCRD has not provided evidence that the piping has been removed, and no longer serves as a potential source of contamination, the extended CS/SI should investigate the piping.

### **Response to Comment #8**

The Department does not see the relevance of the quoted statement from the report nor the explanation provided. Therefore, it is recommended that the statement be removed from the document. Additionally, see evaluation of General Comment #2 regarding SWMU 35.

Evaluation of Responses to SCDHEC Risk Assessment Comments to the Draft CS/SI  
Dated July 2002 for Site/SWMU 4, Site/SWMU 5, Site/SWMU 7,  
Site9/SWMU8, Site 13c/SWMU 13, Site/SWMU 16, SWMU 27, and SWMU 35

1. Original Comments 1 and 6 request additional background information. The response to comments states that the information will be attached as Table 4-1 and Appendix H. No attachments were included in the response to comments. Before the comment resolution can be completed, the Department requests that the additional information be submitted.
2. Original Comments 5, 11 and 18 request additional information prior to justifying that VOCs originated as laboratory contaminants. According to EPA guidance, the level of the common lab contaminant detected in the sample should be compared to the level detected in the blank sample. If the blank contains detectable levels of common lab contaminants, then the sample results should be considered positive only if the concentrations in the sample exceed 10 times the maximum amount detected in any blank. If the blank contains one or more compounds that are not considered common lab contaminants, then the results should be considered positive only if the compound in the site sample exceeds five times the maximum amount detected in any blank. Please include laboratory blank information in relationship to EPA's "5x and 10x rule".
3. Original Comment 22 regarding SWMU 27 and Comment 25 (SWMU 35) discuss SSL exceedances that require further evaluation. The Department does not concur with the rationale provided in the response that an asphalt cover prevents leaching from surface soils. The Department does not consider asphalt covers to be permanent barriers. Also, based on the information provided, the areas of asphalt covers at SWMU 27 and 35 may increase the leaching potential and contaminant migration to any nearby, down-gradient grassy areas.

**Hargrove General Comments:**

- 1) Response Acceptable
- 2) Site 4: It should be clarified whether reference to "established MCRD Parris Island soil background values" refers to the actual background values OR a comparison to two-times the background value.

Site 5: Accepted.

Site 7: The Tier I team should meet to discuss the path forward for this Site. Specifically, the scoping of additional investigation(s) should be discussed, as well as when and how remediation can be recommended.

Site 9/Site 16: The Tier I team should meet to discuss the path forward for this Site with respect to scoping of additional investigation(s).

Site 13C: The Tier I team should meet to discuss the path forward for this Site with respect to scoping of additional investigation(s).

SWMU 27: Accepted.

SWMU 35: The Department does not concur with the current recommendation. SWMU 35 is still an active SWMU. Until this SWMU is no longer in use by MCRD, the SWMU should remain open.

- 3) The Division of Hydrogeology will defer to the Division of Hazardous and Infectious Waste Management on Stamps Comments #1 and #2.

**Hargrove's Specific Comments:**

- 1) Response Acceptable.
- 2) Response Acceptable.
- 3) a) Response Acceptable.  
b) The response to this comment is acceptable for this document only. MCRD should note that R.61-71 of the South Carolina Well Standards were revised on 26 April 2002. These revised Well Standards contain very specific requirements for abandonment of DPT monitoring wells (R.61-71.H.3). All future use of DPT methods for installation of temporary or permanent monitoring wells must follow these requirements.
- 4) a) Response Acceptable.  
b) The Division of Hydrogeology will defer to the Division of Hazardous and Infectious Waste Management on Stamps Comments #1 and #2.
- 5) a) Response Acceptable.  
b) Response Acceptable.  
c) Response Acceptable.  
d) It should be clarified whether reference to "established MCRD Parris Island soil background values" refers to the actual background values OR a comparison to two-times the background value.  
e) Response Acceptable.

- 6) Activities associated with the pump house might be relevant, depending on what function the pump house performs. Whether the pump house is or is not related to prior operations at Site 5 is not relevant. Judging whether the pump house could be affected by contamination from Site 5 is relevant. To answer this comment, MCRD simply needs to state how they use this pump house.
- 7) The information included in this response should be added to the text in order to explain the J qualifiers, and lend credibility to the analytical results.
- 8) Response Acceptable.
- 9) This site is an active SWMU, and as such, access to the site should be restricted to reduce exposure risk. MCRD should take steps to ensure and maintain security at this SWMU so that recruits and personnel training in this area are not exposed to risk as associated with this SWMU. There are currently no signs to warn people about this area, and there is no fencing to keep people out of the area. MCRD needs to maintain some form of security at this SWMU as long as it is active.
- 10) Response Acceptable.
- 11) a) Response Acceptable.  
b) The Division of Hydrogeology will defer to the Division of Hazardous and Infectious Waste Management on Stamps Comments #1 and #2.
- 12) This comment concerns the monitoring well that was installed prior to environmental investigation activities associated with this report. The well is located out in the field, south of the pesticide facility that MCRD is currently using. The well is not associated with Sites 9 or 16 (as far as I know). The comment asks that information about the existence of that well be included in this report as part of the current conditions of the area surrounding Sites 9 and 16.
- 13) a) Response Acceptable.  
b) This response does not address the comment. Any revision to this section must include the deletion of text per this comment. The term "likely attenuate" is not substantiated with compelling data, nor is it likely that it can be. Even though MCRD plans to further investigate Site 13C, this comment should be noted for future reference.
- 14) Response Acceptable.
- 15) The response does not address the comment adequately. Soil removal can eliminate the source area for further groundwater contamination, but it does not ascertain the nature and extent of groundwater contamination. This comment stands.
- 16) Response Acceptable.

17) The statement in question is "...phthalates are ubiquitous in the environment due to plastic wastes and common laboratory contaminants." It should be explained how deeming something "a common laboratory contaminant" can support the claim for ubiquity. The response does not mention common laboratory contamination, and therefore does not address this portion of the original comment. The response would help to rule out a positive detection if the site in question had no previous history that indicated the possibility of a release of the contaminants in question. However, if the site in question routinely dealt with various materials that cannot be completely documented, or the site accepted waste from numerous sources, or the site activities raise the possibility of the contaminants past use and cannot document that they were never used there, any positive detection is presumed to be site related. If MCRD wishes to make the argument that these positive detections are not site related, they must substantiate that argument. Simply citing one ATSDR source is not sufficient.

The original comment still stands. Information regarding the Site(s) in question should be presented that shows no risk of releases from the contaminants in question. If this information cannot be presented, the contaminants should be considered site related. The argument that laboratory contamination is an indicator of ubiquity is invalid, and should be deleted from the text.