

M00263.AR.000867
MCRD PARRIS ISLAND
5090.3a

LETTER OF TRANSMITTAL AND U S EPA REGION IV COMMENTS ON PROPOSED PLAN
FOR SITE 3 CAUSEWAY LANDFILL MCRD PARRIS ISLAND SC
9/10/2010
U S EPA REGION IV



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

**Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960**

September 10, 2010

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4SD-FFB

Naval Air Station, JAX
Navy Facilities Engineering SE
Installation Restoration, SC IPT
Attn: Charles Cook
PO Box 30
North Ajax Street, Bldg 135
Jacksonville, FL 32212-0030

And

Commanding General
Marine Corps Recruit Depot
Natural Resources & Environmental Affairs
Attn: Tim Harrington
PO Box 5028
Parris Island, SC 29905-9001

SUBJ: EPA Review of the Marine Corps Recruit Depot (MCRD), Parris Island, Site 3 Proposed Plan D1, Rev 1, MCRD, Parris Island, South Carolina (August 2010).

Dear Sirs:

The U.S. Environmental Protection Agency (EPA) has completed its expedited review of the subject document and is providing some limited comments in order to be responsive to the Navy's request so that they can prepare a Draft Final version in a timely manner. As a general matter, the Draft Proposed Plan (PP) does not look like what EPA had anticipated based on previous versions provided by the Navy and earlier EPA comments. If modifications to the PP had been made by following previous comments as suggested with additional text on fish tissue info being added, then fewer EPA comments would have been generated. These EPA comments should allow the Navy/MCRD to proceed with modifications which should result in a document that is closer to meeting EPA's expectations. However, since sufficient time was not allowed for review, EPA may still have concerns with the revised document. Therefore, the Navy/MCRD should consider allowing for informal review of the revised document prior to submittal in order to avoid submittal of a D2 which EPA cannot approve without conditions.

If there is any way EPA can assist in helping you to address these comments, please do not hesitate to call. I can be reached at (404) 562-9969.

Sincerely,



Lila Llamas
Senior RPM
Federal Facilities Branch
Superfund Division

cc: **Meredith Amick, SCDHEC**
Annie Gerry, SCDHEC
Mark Sladic, TtNus ✓

EPA REGION 4 COMMENTS

For the Marine Corps Recruit Depot (MCRD)

Parris Island, South Carolina

Site/SWMU 3

Proposed Plan - August 2010.

September 10, 2010

EPA GENERAL COMMENTS WITH SOME SPECIFIC TEXT REFERENCES:

1. **Presentation of Technical Information.** There is far too much technical risk information included in the Proposed Plan. The PP should summarize potential unacceptable site risk (and reference the Tech Memo as appropriate), and propose a plan to address the potential risk. The PP is intended to present the basis for taking an action, and the proposed action to be taken, in layman's terms. This is to make it easy for the public to understand, ask questions, or make comments on the proposed plan. Revise the PP accordingly, taking into consideration the following comments, as applicable, in what will likely be a major revision.
2. **Final Proposed Remedy:** Since the Final Remedy Proposal Summary textbox on Page 2 is a rough summary, it is not absolutely necessary to reflect the exact final remedy. However, it would be beneficial to the public if it better represented the interim action components being adopted, the modifications/additions being made to the interim remedy, and the new remedy determinations being made. Unlike the textbox, the discussions on Page 3 describing the interim actions and Page 11 describing the Final Remedy should more closely correspond to the Site 3 Interim Record of Decision (IROD) components and the adoptions/changes being made. For ease, EPA suggests the following outline for organizing points for the Proposed Plan and that could be used in a textbox:
 - **Adoption of the Interim Remedial Action as Final** (with slight modifications).
 - Slope Stabilization and Erosion Control (Adopted/Completed)
 - Placement of Soil Cover (Adopted/Completed)
 - Roadway Construction/Sediment Testing (Adopted/Completed)
 - Land Use Controls (LUCs) & Periodic Inspections (Adopted with Modifications)
 - Erection of Signs (providing notice of the use restrictions)
 - No unauthorized intrusive activities (e.g. drinking water well installation; unauthorized groundwater extraction; soil cover penetration, etc.)
 - No swimming or wading
 - Fishing restrictions (Modified)
 - Fish Consumption Risk Communication (New)
 - Update Base Master Plan, GIS and EMS on LUC boundaries and land-use restrictions (i.e., no residential use, etc.)
 - Deed/lease restriction in the event of property transfer
 - Visual inspections to verify LUCs are effectively implemented.
 - Long-Term Monitoring (Adopted with Modifications)
 - Inspect Cover Integrity (Modified)
 - Monitor Leachate from landfill with GW wells inside the unit boundary
 - **Maintenance of the Soil Cover/Cap (New)** ((See Site 1 ROD for example))
 - **No Action for Sediments (New)**
 - **No Action for Surface Water (New)**

3. Public Comment: The discussion on Page 2 in the last paragraph before "Site Background" could be worded better. The final remedy is adopting earlier actions performed under the IROD along with some modifications, and some new No Action determinations. The public can comment on any aspect of the final remedy, so technically they could comment on the earlier components as implemented. The Navy should describe the interim action as completed and justify adoption of it as final. For example, in the discussion of the interim remedy on Page 3, describe these actions as being completed and state whether the Remedial Action Objectives (RAOs) are being met or not as justification for adoption of the interim remedy as final. It should be considered as to where this discussion is most appropriate. Perhaps there should be a brief summary in the Site Background section, and then a new detailed section called "Adoption of Interim Action as Final" just before "Remedial Action Objectives". That would make for a good segue into Adoption of Interim RAOs as final. (See comment further down regarding RAOs.)
4. Use of unfamiliar terms and references to CERCLA: In certain places in the PP (for example Page 3, last Par.; Page 8, 2nd Par. of Summary of Site Risks - Fish Tissue; etc.) the text states "... consumes more fish than CERCLA established fish ingestion rates." It is unclear what is intended by this statement. Please clarify, or use non-CERCLA terms which have commonly accepted meanings, or remove the statement and revise the text to make your point (e.g. should this be "more fish than CERCLA default recreational fish ingestion rates", or "more fish than average", or what?)
5. Vague statements of Pond concentrations and risk vs. Reference concentrations and risk: In certain places in the PP (for example Page 3, last sentence; Page 9, first full paragraph) the text makes statements such as "...However, these risks are "similar to those calculated for the reference location." This description is too vague. To better reflect the comparisons between the two, the sentence should be reworded as "... are similar to, but exceed, those from the reference location."
6. Statements pertaining to Sediment and/or Surface Water media as not resulting in unacceptable risks. In various places throughout the PP; (for ex. Page 2 textbox bullets; Page 3, first Par. after the bullet list; Page 6, first Par. of Post-IRA Human Health Risks; Page 8, first Par. Post-IRA Sediment Risk Conclusions; Page 11, bullet for No Action for Sediments; Page 12, No Action for Surface Water) the text makes statements such as "...no unacceptable human health or ecological risks exists...". These statements throughout the PP should be modified to read, "... no unacceptable human health or ecological risks, other than that generated by fish consumption (to be addressed by LUCs), exists...". EPA recognizes fish contamination is related to sediments and/or surface water, and should the text should reflect that as well.
7. Scope and Role of This Action Section. The first sentence states "fifty-five (55) sites being investigated under the auspices of CERCLA...". The FFA had only 29 sites listed and 8 MRP sites are being added. Please correct the statement.
8. Lack of Summary of Site Risk – Surface Water. On page 8, after the sediment conclusions but before the fish tissue discussions, the Navy should add a discussion of the site risk for surface water as captured in the Tech Memo conclusions for surface water. This information

must be present in the Proposed Plan to support a determination that no further action is needed for surface water.

9. Agency Roles in Analysis of Fish Tissue. On Page 8, first Par. of Summary of Site Risks – Fish Tissue, the text mentions analysis of fish tissue included DDE and DDT in addition to DDD “and dioxin-like PCBs at the request of U.S. EPA.” This should be revised to state that analysis included DDD, DDE, and DDT “at the request of U.S. EPA and NOAA, and PCBs at the request of SCDHEC based on recommendations of ATSDR. In order to address SCDHEC's request for PCB analysis, EPA's guidance required the analysis of PCB congeners. This allowed for appropriate detection limits and for comparison against screening levels for fish tissue.” Also correct this if similar text occurs elsewhere in the document. Otherwise, remove all references to specific Agencies and simply describe what was done and for what purpose.
10. Receptors found to be at potential risk. The PP text in a few places mentions the receptors for which potential risks exists. However, the language is confusing and vague with respect to “recreational” fishers (ex: Page 9, first complete Par.) The receptors for which an “unacceptable” risk was generated, in accordance with CERCLA and EPA guidance, should be clarified.
11. Conclusions that fish contamination is anthropogenic background. The text on Page 9, last par. states, “... it is reasonable to conclude that contamination identified in fish at both the reference location and the 3rd Battalion Pond is anthropogenic background rather than that resulting from any Site 3 related release(s).” The Tech Memo discusses much uncertainty related with the fish tissue study. While this uncertainty can be used to make an argument that the fish tissue *may* not be site related, statistical analysis of the data showed mixed results in comparisons of the two data sets; excluding PCBs (the contaminant most in question), potential unacceptable risks were still generated by COCs which were detected in sediments above background, and these COCs could not be eliminated from consideration based on reported waste disposal practices for the landfill. Therefore, the landfill cannot be eliminated as the source for these contaminants. Please modify the text to also reflect this conclusion.
12. Discussions of No Action for Groundwater (GW) and Summary of Site Risks – Landfill Leachate. The PP mentions No Action for Groundwater in a variety of places (Page 2 textbox, page 12 bullet, etc.) and discusses Landfill Leachate as a Site Risk being evaluated (Page 11.) The clarifications made on the last conference call pertaining to GW were not properly conveyed in the Proposed Plan. As is, the plan indicates a No Action determination is being made for GW. However, what was discussed on the call was that GW outside of the waste unit boundaries was never investigated, due to the expectations that attempts to withdraw GW from areas beneath the pond or the marsh would draw water that exceeded the TDS and/or salinity standards EPA uses to determine if groundwater should be considered potable. This conclusion was based on exceedances of TDS and/or salinity data from the GW taken from beneath the waste unit. Therefore, groundwater outside of the waste unit was not investigated and the agencies cannot make a final remedial decision pertaining to GW outside the waste unit. Consistent with EPA policy and guidance, contaminated GW underneath the waste unit will not need to be restored to meet MCLs since it is not expected to be used as a drinking water supply. GW monitoring would continue as part of the final remedy to determine whether there are releases from the buried waste (i.e., landfill or waste

disposal unit). The PP should be modified to reflect this, including, but not limited to, the following issues:

- Therefore, the discussion in "Summary of Site Risks - Landfill Leachate" probably should be moved up front in the "Site Background" or "Site Characteristics" section, but not as site risk being evaluated. The summary of site risks should only address media that are currently being evaluated for final action. Landfill leachate is not a media per se and the purpose of the monitoring was to evaluate releases from the buried waste.
 - Monitoring was part of the interim remedy and will be continued. It does not need to be identified in the Text Box on page 2 or in a major bullet on Page 11, as a major component but rather as a sub-bullet under Adoption of Interim Remedy. (See Final Proposed Remedy comment above.)
 - The LUCs are another IROD component that is being adopted as final with some slight modification (i.e., adjustment to sign wording and possible risk communication). It does not need to be identified, in the Text Box on page 2 or the bullet list on Page 12, as a major component, but rather as a sub-bullet under Adoption of Interim Remedy. Some of the LUCs for the Site were to address no intrusive activities on the landfill, including activities such as GW drinking well installation, etc. Additional GW monitoring wells would be allowed as approved by EPA and SCDHEC. (See Final Proposed Remedy comment above.)
13. Maintenance of the Landfill Cover. Maintenance of the Landfill Cover was not specifically identified in the IROD, but must be identified as a separate component of the final remedy. See Site 1 ROD for example. This is in addition to LUCs, not part of the LUC monitoring. This would address maintenance of the cap pertaining to removing woody vegetation, as well as mitigating erosion, etc.
14. Remedial Action Objectives (RAOs). On page 11, the RAO discussion should discuss adoption of the Interim RAOs as final, and identify them (from the IROD). You may describe here again, how the RAOs are being met or not and are considered protective. An additional RAO should be developed to control human exposure to chemicals of concern in fish via consumption. Then state that an action, in the form of modified LUCs, is being taken to address this. This will require a significant rewrite of this section of the PP.
15. LUC Objectives. The PP mentions LUC objectives to "provide notice to" individuals ... that "other than recreational fishing-based consumption of fish..." may result in risks. However, the Tech Memo indicates unacceptable non-cancer risks for not only adult and child subsistence fishers, but also for child recreational fishers, as well as default adult recreational fishers. Therefore, the proposed LUC Objective does not sufficiently mitigate unacceptable risks and needs to be revised. EPA is willing to negotiate this LUC objective language. Additionally, a return is missing for the last LUC objective pertaining to extraction or any use of the groundwater beneath the site. This objective needs to be addressed as described in the comment above pertaining to groundwater and leachate.
16. Engineered Controls. The format of the PP with respect to LUCs and Engineered Controls is confusing since erection/posting of signs is one of the LUCs that is part of that remedy

component. Detailed discussions of the LUCs should be indented to allow the reader to quickly recognize them as part of the LUC component. The signs technically are an "engineered control" but for purposes of communicating to the public, it is unnecessary to parse the types of LUCs, such institutional controls, administrative controls, engineered controls, or governmental controls. EPA prefers that the term LUCs be used in the PP as one of the remedy components and the Navy identify the actual controls that will be employed. While EPA agrees the current sign language regarding fish consumption needs to be revised, the proposed sign language is not acceptable. Unacceptable risks were also calculated for some recreational receptors, and the sign may not sufficiently alert fishers. Remove the sign language from the Proposed Plan. EPA has provided the Navy and SCDHEC with examples of language that is acceptable and if needed is willing to work with the FFA parties to develop sign language that is acceptable to all parties. The specific language for each may be negotiated in the LUC Remedial Design. Consistent with an earlier comment, EPA recommends the PP call for modification of one of the LUCs in the form of signs with updated sign language, accompanied by risk communication efforts.

17. **Targeted Risk Communication.** In the Preferred Final Remedy "Targeted Risk Communication should be a sub-bullet, along with LUCs, under the bullet for Adoption of the Interim Remedial Action (IRA). See comments above and example of the tiered approach for addressing remedy components.
18. **Institutional Controls.** As stated above in several comments, EPA prefers that the term LUCs be used in the PP as one of the remedy components and the Navy identify the actual controls that will be employed. The erection of signs with revised language related to fish consumption, along with existing signs to prevent unauthorized intrusive activities and swimming; the update to the Base Master Plan, GIS, and EMS along with deed/lease restrictions in the event of property transfer are the LUCs that will be employed as part of this remedy. Other than the revised language on the signs to address fish consumption, the PP probably doesn't require the level of detail for each of the administrative controls provided since that can be included in the ROD and LUC RD. Additionally, the PP needs to explain that the LUCIP appended to the IROD is going to be superseded by a LUC RD issued after the Final ROD since the use restrictions and actual LUCs are somewhat different than what the LUCIP provides.
19. **Conclusions.** This paragraph should be reworded to better describe the conclusions that lead to the Preferred Final Remedy, and that remedy in summary form.