

M00263.AR.000076
MCRD PARRIS ISLAND
5090.3a

U S EPA REGION IV COMMENTS ON DRAFT FINAL REMEDIAL INVESTIGATION WORK
PLANS FOR SITE 1, SITE 2, SITE 3, SITE 15 AND SITE 41 MCRD PARRIS ISLAND SC
7/22/1997
U S EPA REGION IV

**COMMENTS FROM U.S.EPA REGION 4 FEDERAL FACILITIES BRANCH
DRAFT FINAL REMEDIAL INVESTIGATION WORK PLANS
FOR SITES 1, 41, 2, 15 and 3
MCRD PARRIS ISLAND, SOUTH CAROLINA**

Site 1 (Incinerator Landfill) and Site 41 (Former Incinerator):

1. Pages 3-1 through 3-2, Section 3.0:

According to the text, "This section presents a conceptual model and discussion of potential migration and human and ecological exposure pathways." However, the text does not indicate whether the identified pathways are applicable to human receptors, ecological receptors, or both. Nor does it indicate if any other aspects of the exposure pathways identified are unique to the receptor being considered. This information must be provided to ensure development of an adequate site conceptual model.

2. Page 4-12, Section 4.2.2.3:

As discussed and agreed to during the July 1997 Partnering Meeting, two surface water samples will be collected and analyzed for hexavalent chromium for risk assessment purposes. Verification of the hexavalent chromium content of surface water samples is appropriate, since chromium has been detected in previous sediment samples and surface water samples have never been collected at this site.

3. Page 4-1, Section 4.0:

Given that a presumptive remedy approach will be used to evaluate this site, appropriate steps should be taken to notify the public of this approach. It is important that all stakeholders understand completely how the presumptive remedy process varies from the usual cleanup process, and the benefits of using this process. Please refer to EPA Directive entitled *Application of the CERCLA Municipal Landfill Presumptive Remedy to Military Landfills* (Directive No. 9355.0-67FS, December 1996) for information and documents to be provided to the public via mechanisms such as the Administrative Record, Fact Sheets, etc.

4. Page 5-2, Section 5.2:

The description of the ecological risk assessment to be performed must be comparable, in level of detail, to that provided for the human health risk assessment. For example, information on potential COCs (e.g. results of previous investigations), exposure pathways and receptor groups should be provided. Site-specific approaches to completing the generic steps identified in the Volume III Master Work Plan should also be provided. If Work Plan/SAP addendums will be generated to complete the plans for conducting the Ecological Risk Assessment, these addendums should also be clearly identified and described (e.g. purpose, contents, submittal criteria) in the present SAP.

5. Page 7-1, Section 7.2:

Regarding the rationale for the proposed sampling, the SAP currently includes some good general criteria for selecting sampling locations (e.g. "...a primary sampling concern will be to

characterize the worst-case site condition of each media investigated..” (p. 4-6, Section 4.1); “If during field activities, the FOL deems that a location not contained in the Work Plan should be sampled because of surface features (e.g. depressions) that would cause preferential accumulation of contaminants, the sampling plan will be altered to include these locations (p. 7-1, Section 7.2).

However, as discussed and agreed to during the July 1997 Partnering Meeting, in order to assure that these goals are accomplished on a sample-specific basis, the RI Report will briefly describe (e.g. 1-2 sentences) the justification for each sample collected.

6. Page 7-13, Figure 7-4:

As discussed and agreed to during the July 1997 Partnering Meeting, one additional monitoring well pair will be installed on the western and eastern sides of the landfill (total of 4 additional wells). This will result in the collection of a groundwater sample at least every 200-300' around the landfill perimeter, ensuring better characterization of potential offsite groundwater contaminant migration .

7. Page 10-1, Section 10.2:

Section 5.13.10 (Estimating Variability) of the EPA Region 4 SOPQAM cites the need for collecting material and preservative blanks. The Navy’s decision not to collect QA/QC blanks for grout, sand bentonite and a preservative blank is acceptable, so long as the Navy assumes the risk for false positive detections.

Site 2 (Borrow Pit Landfill) and Site 15 (Dirt Roads):

1. Comments 1, 3, 4, 5 and 7 on the Site 1/41 SAP are also applicable to the Site 2/15 SAP.

2. Page 7-6, Figure 7-1:

As discussed and agreed to during the July 1997 Partnering Meeting, one additional sediment/surface water pair will be collected from that portion of the inlet closest to the treeline and the bermed southwestern edge of the landfill. These samples will be biased to monitor for the maximum concentrations of contaminants migrating from the landfill into this adjacent marshy area.

Site 3 (Causeway Landfill):

1. Comments 1, 3, 4, 5 and 7 on the Site 1/41 SAP are also applicable to the Site 3 SAP.

2. Pages 2-8 through 2-13, Section 2.3:

The results of previous investigations (Verification Study and Extended Site Inspection) indicate that Site 3 contaminants may have adversely impacted ecological receptors. Several surface water and sediment samples contained metal concentrations which exceed Region 4 ecological screening values. Biological tissue samples contained pesticide and PCB concentrations which need to be evaluated for their effects on ecological receptors. Other sections of the present Work Plan (in particular, Sections 4 and 7) fail to acknowledge these findings, or specify how the

proposed sampling will produce adequate information to address and resolve these concerns. In order for EPA to consider the RI for this site complete, it must include an adequate evaluation and assessment of this earlier data. The Work Plan must therefore be revised to address this information.

3. Page 4-1, Section 4.0, Paragraph 3:

Please revise the second sentence to read “Additionally, if analytical results indicate the lower surficial aquifer has been adversely impacted by the landfill....”.

4. Page 7-9, Figure 7-3:

It is unclear why two of the three shallow wells proposed will be located at the northwestern end of the causeway, when “historical records indicate that more solid waste debris may have been disposed in the southeastern portion of the causeway” (p. 7-1). The RI Report submitted must clearly describe how the groundwater samples collected address the “primary sampling concern...to characterize the worst-case site condition of each media investigated..” (p. 4-6, Section 4.1).