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LETTER AND COMMENTS FROM MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY REGARDING REVIEW OF EXCAVATION OF PCB CONTAMINATED SOIL SITE 10
NCBC GULFPORT MS
10/31/2000
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OF MISSISSIPPI
DAVID RONALD MUSGROVE, GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

31 October 2000

Art Conrad
Naval Facilities Engineering Command
Southern Division
2155 Eagle Drive
P.O. Box 190010
North Charleston, South Carolina 29419-9010

Re: Excavation of PCB (Polychlorinated Biphenyls) Contaminated Soil from the Drainage Ditch Adjacent to the Parade Field, Naval Construction Battalion Center, Gulfport, Mississippi, July 2000.

The Mississippi Office of Pollution Control has reviewed the above referenced document and offers the following comments and suggestions.

1. Surface water flow direction should be given in the report.

2. Page 2-1: the text reports a maximum soil PCB concentration of 1, 260 ppm for Phase 1 of the investigation, although Table 4-1 and the discussion given on page 4-3 (paragraph 4) report a maximum Phase 1 soil PCB concentration of 1, 240 ppm.

3. Page 2-3, paragraph 5:the text of the general discussion reports the occurrence of groundwater at a depth of 9 feet below land surface (bls), although groundwater is reported at a depth of 8 feet bls on page 6-1 (paragraph 4).Groundwater occurrence is not addressed in the detailed discussion of sampling of this horizon (Phase 2 sampling) beginning on page 4-5. Groundwater characteristics should be addressed in more detail and consistent information should be provided concerning the vertical location of the water table.

4. Page 4-5, paragraph 1: the text references Figure 4-2 as the grid layout for Phase 2 sampling, although the legend of Figure 4-2 indicates pertinence only to Phase 1 sampling.

5. The text (page 4-3 and 4-5) description and associated tables (tables 4-1 and 4-2) for sampling phases 1 and 2 refer to sampling locations with letter designations A through T, however the figure referenced for these locations (Figure 4-2) shows three sample

locations for each letter designation. Letter designations should be followed by a suffix as given for Phase 3 on Table 4-5. If these are composite samples, this should be reflected in the text discussion and/or as footnotes in the tables.

6. Figure 4-5 is indicates "proposed" sampling locations for soil and groundwater, although the text indicates these were actual geoprobe and groundwater sampling stations.

7. Near surface PCB soil contamination was reported at and adjacent to the eastern edge of the site excavations (Location T on figures 2, 3 and 4) at concentrations of 400 ppm during Phase 1 and 31 ppm during phase 2 (tables 4-1 and 4-2, respectively). Surface excavation and sampling east of location T is not indicated in the report.

   Although geoprobe sampling locations extended eastward from Location T (locations U, V, W and X on Figure 4-5), reported sampling depths begin at 10 feet and no near surface results are reported for this sampling effort in the text discussions or on geoprobe sampling results given on page 4-7 (Table 4-3).

   Soil sampling locations within each depth interval (horizon) should extend laterally to areas with concentrations below detection limits as was performed in western areas of the site (locations A through G, phases 1 and 2). If near surface soil sampling results are available for areas east of Location T, they should be included in the report. If near surface horizons equivalent to Phase 1 (1 to 3 feet deep) and Phase 2 (3 to 9 feet) were not samples east of Location T, then additional sampling in these areas should be performed.

8. The four sampling locations shown as "Proposed Sampling Locations " (see comment 6) appear to be reasonably located near higher soil PCB concentration zones, although future groundwater monitoring is not recommended or discussed in the report. At least three (one upgradient and two downgradient) permanent groundwater monitoring wells should be installed in order to evaluate possible PCB contamination of groundwater in the future.

   Initial sampling events should include analyses for VOCs, SVOCs, and PCBs in order to insure the absence of mobilizing agents, as PCB soil concentrations increased with depth to about the elevation of the water table.

   Filtered and non filtered groundwater samples should be collected for PCB analysis in order to evaluate adsorption and groundwater mobilization of PCB by particulates.

9. Periodic site surface water sampling should continue (along contaminated intervals in contact with drainage as well as downstream) in order to insure that PCBs are not released into the drainage system. Any contaminated surface water should be properly treated and disposed of.

10. Upon demonstration of the lack of surface soil and groundwater contamination, the risk analysis (as recommended on page 6-1) should demonstrate that at least 2 feet of uncontaminated soil remains above contaminated soil horizons, and that there is no further release of contaminants (PCBs) to surface water or groundwater.

Please feel free to contact me if I can be of further assistance.

Sincerely,

Bob Merrill

cc. James Barksdale, USEPA