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LETTER AND COMMENTS FROM U S EPA TO SIXTY PERCENT REMEDIAL DESIGN SITE 8
NCBC GULFPORT MS
7/23/2003
U S EPA REGION IV

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

July 23, 2003

Art Conrad
Remedial Project Manager
Southern Division, Naval Facilities Engineering Command
2155 Eagle Drive, Post Office Box 190010
Charleston, South Carolina 29419-9010

SUBJ: EPA Comments on the 60% Remedial Design for Site 8-Herbicide Orange Storage Area and Off-base Area of Contamination
Naval Construction Battalion Center
Gulfport, Mississippi

Dear Mr Conrad:

Please find enclosed EPA's comments on the above referenced document. EPA is providing these comments to the Navy as part of the consultation provisions of CERCLA. If you have any questions about these comments or any other issue, please feel free to call me at (404)562-8506.

Sincerely,

Robert H. Pope
Federal Facilities Branch
Waste Management Division

cc: Bob Merrill, MDEQ

EPA COMMENTS ON THE 60% REMEDIAL DESIGN FOR SITE 8-HERBICIDE ORANGE STORAGE AREA AND OFF-BASE AREA OF CONTAMINATION NAVAL CONSTRUCTION BATTALION CENTER GULFPORT, MISSISSIPPI

Introduction

A Technical Review of the 60% Remedial Design for Site 8-Herbicide Orange Storage Area and Off-base Area of Contamination, NCBC-Gulfport, May 2003 was performed. The wetland delineation portion of this plan was considered outside of the scope of this technical review as this will be reviewed by the U.S. Army Corps of Engineers. Only minor comments were made on the Sediment and Erosion Control Plan because this is under the purview of the State of Mississippi.

The following references were used in the review of the report:

> EPA Region IV, 1996. Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM). Revised November 2001.

GENERAL COMMENTS

1. The excavated contaminated sediments will be dewatered, although not completely, while staged at the materials handling pad. The disposition of the remaining potential leachate is not clear. For example, will the remaining water be driven off by the heat of reaction when the cement is added, or squeezed out when the stabilized material is compacted prior to construction of the cap. The disposition of all leachate should be clarified in the text.

2. Sediment retention traps (SRTs) are proposed to keep contaminated sediment from migrating downstream during excavation and construction. The effectiveness of the SRTs in capturing contaminated sediment was not stated in the text (i.e. how much sediment is trapped by the SRTs by percentage). This information should be added to the text.

3. Section 4.6 of the RD Report states that Site 8A will be considered clean after the soil ash is removed and stabilized. The text does not indicate whether contaminated soils are still present at sites 8B and 8C. Because herbicide orange was also stored at these sites, this information should be added to the text.

4. Several plans and evaluations were not provided in the report. These include a borrow source evaluation if an on-base borrow source is to be utilized, an evaluation of the need for a dust control/air quality permit, storage tank sizing

calculations, a construction quality assurance plan, a full operations and maintenance plan detailing the length of post-closure care and the cap inspection frequency, and a contingency plan should more sediment be excavated than was planned.

5. A Roller-Compacted Concrete (RCC) cap is to be installed over stabilized contaminated soil. RCC typically develops cracks at regular intervals (30 to 50 feet) and can not be adequately reinforced. These cracks will allow water to percolate through to the buried waste containing Herbicide Orange. The Navy has committed to grout and seal any cracks, an important aspect of site maintenance. Assuming that the two SPLP leachate samples collected during pilot testing adequately reflect the leachability of all contaminants in the stabilized material blend, and assuming that cracks are promptly sealed, percolation should not present a problem. Performance will need to be addressed through site monitoring.

SPECIFIC COMMENTS

1. **Section 3.2.2.6, page 3-7**. This section states that the toxicity equivalent (TEQ) for the leachate sample collected from the materials handling pad during the treatability study contained 1.2 picograms per liter (pg/L) of dioxin. The text erroneously states that this is less than the EPA Region III risk-based concentration (RBC) value of 0.45 pg/L. This discrepancy should be corrected.

   In addition, the text states that treatment of the leachate at the materials handling pad would not be required prior to discharge to a stormwater drainage channel. Other portions of the report and the plan sheets (refer to sheet C-14) indicate that this leachate will be collected in a sump and pumped to an above-ground storage tank. Because of the fate and transport characteristics of dioxin, the solids should be removed from the leachate prior to discharge of the water to the drainage channel. The settled particles should either be incorporated into the cap or sampled to determine their disposition.

2. **Stormwater Pollution Prevention Plan, Section 2.3, page 2-6 and Sheet C-11**. This section provides the sequence of construction. The sequence indicates that the off-base areas will be excavated prior to the on-base stormwater ditches. To prevent contaminated sediment migration to newly excavated areas, the drainage ditches should be excavated and stabilized from upstream to downstream. The on-base stormwater ditches should be excavated first, followed by the offsite areas, working downstream. Culverts should be installed and removed as needed by the section and not installed all at once. The sequence should be modified unless it can be demonstrated that the distribution of SRTs will effectively capture contaminated sediment.

   Item 13 of the sequence states that verification samples will be collected for the on-base channels as per item 11 of the sequence. The first sentence of Item 12

should also be added to Item 13, stating the resident officer in charge of construction (ROICC) will approve the restoration after the results of the verification samples are received.

3. **Drawing C-7**. This drawing provides sediment and erosion control plans for Site 8. Site 8A is not surrounded by silt fence. According to drawings C-9 and C-10, the site should be surrounded by super silt fence. This apparent discrepancy should be corrected.

4. **Sheet C-26**. This sheet provides excavation details. The depth of excavation provided on Detail 6 for the off-base areas is stated to be 18 inches. The text states that contamination was detected to a depth of 2 feet. The sheet must be changed to insure removal of contamination to the detected depth of 2 feet. If the Navy wishes to excavate to the shallower depth, a full and thorough justification for only excavating to 18 inches should be provided.