

CTO-370/ARF



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, S.W.  
ATLANTA, GEORGIA 30303-3104

October 22, 1998

4WD-FFB

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Ms. Maritza Montegross  
Department of the Navy - Atlantic Division  
Naval Facilities Engineering Command  
Code 1823  
Norfolk, Virginia 23511-6287

SUBJ: MCB Camp Lejeune  
Draft Statement of Work  
Sites 9 & 54

Dear Ms. Montegross:

The Environmental Protection Agency has completed its review of the above subject document. Comments are enclosed.

If you have any questions or comments, please call me at  
(404) 562-8538

Sincerely,

A handwritten signature in cursive script, appearing to read "Gena D. Townsend".

Gena D. Townsend  
Senior Project Manager

Enclosure

cc: David Lown, NCDEHNR  
Neal Paul, MCB Camp Lejeune

## 1.0 GENERAL COMMENTS

1. The Civil Drawings for this Basis of Design document are missing the following.

- The drawings do not include soil erosion and sedimentation control measures. The drawings should show the locations of these control measures (silt fences, trench protection, etc.).

2. It is unclear why the well soil borings are included with the drawing set. The location of these wells are not shown on the drawing and their importance to the drawings is not explained. If these borings are to remain in the drawing set, then the locations of the wells should be shown.

3. The drawing set does not include a mechanical drawing for Site 9. This drawing should be included as one is included for Site 54.

4. Several items are not included in the existing specification list. These include a specification for the perforated and solid HDPE drain pipe, propane tanks, pumps, vaporizers, and the new propane/water separator.

## II. SPECIFIC COMMENTS

### 1. Drawing C-2.

The drawing is missing the following information: the vertical survey control point, the discharge point for the existing oil/water separator (TP445), and the section cuts for Sections 1 and 2 shown on Sheet C-4. This information should be added to Sheet C-2. Section cuts across the new fire training area pits should also be shown on Sheet C-3.

### 2. Drawing C-3.

The drawing shows the new propane/water separator and discharge line from the unit. However, there is no indication whether rip-rap is going to be provided at the headwall of the discharge pipe. Rip rap should be added at the headwall location.

3. Drawing C-4, Section 2.

The drawing also shows material over the No. 3 Stone but does not label the type of material to be used. The type of material (backfill, fill, etc.) should be labeled on the section.

4. Drawing C-5, Detail C.

The drawing shows the HDPE pipe penetration into the propane/separator wall. However, the link seal size/model is not specified. In addition, the pipe sleeve shown is not applicable at Site 9 since the pipe will penetrate an existing wall. The sleeve cannot be put into an existing wall. The link seal model should be specified. The use of double link seals at the existing wall (Site 9) should be evaluated.

5. Section 01115, Part 1.4, Item 3, Page 7.

This sentence states that an observation/fire control station will be constructed at Site 9. However this structure is not shown on Sheet C-2. This discrepancy should be resolved.

6. Section 01115, Part 1.4, Item 4, Page 7.

This sentence states that propane lines from the existing propane storage tanks to the fire training equipment will be installed at Site 9. However, Sheet C-2 shows a new 15,000 gallon propane tank and lines from this tank to the new fire training burn area. The discrepancy between specifications and plans should be resolved.

7. Section 01430, Page 3, Part 3.1.1.1.

This part discusses confirmation samples and soil concentration levels requiring no further excavation (for TPH). However, the cut-off level at which no further excavation is needed is not listed. This value should be listed.

8. Section 02315, Page 7, Part 3.7.

This part describes the compaction requirements for placed materials at the site. However, it is not clear what the compaction requirements are for materials under and on top

of the fire training burn area liners. The compaction in the berms of the fire training burn areas are also not clear. The part should specifically list compaction requirements for the fire training area burn area subgrade, berms, and material on top of the liners (shown on Drawing C-4).

**8. Section 02777, Pages 4 and 5, Part 2.1.3.**

This part lists the required material properties for the geomembrane liner to be used in the fire training burn areas. However, the permeability and fire resistance of the materials are not given. These are considered key parameters for performance of the liner and should be included in the specification.

**9. Section 02777, Page 6, Part 2.3.**

This sentence states that the geotextile shall comply with Section 2302 "Filter Fabric". However, no such section exists. The sentence should refer to Section 02780.

**10. Section 02777, Page 11, Parts 3.7.1 and 3.7.2.**

These parts mention a "geocomposite" membrane. However, this term is not defined. The text should be changed to geotextile if applicable.

**11. Section 02777, Page 11, Parts 3.7.2.**

This part describes protective cover placement. However, the placement of the sand and stone in the fire training burn area is not described. This is of particular interest around the perforated drainage pipe which must have adequate support and protection from training/equipment vehicles to be placed in the training area. The procedures for placement and compaction (if applicable) for this area should be included in the specification.

**12. Section 02780, Page 2, Part 2.1.1.**

This part lists the required material properties for the geotextile liner to be used in the fire training burn areas. However, the fire resistance of the materials is not given. This is considered a key parameter for performance of the liner and should be included in the specification.

13. Section 02780, Page 3, Part 3.1.1.

This sentence states that the geotextile will be used as a cushion between the 80 mil HDPE geomembrane and the compacted soil. However, Specification Section 02770, page 5, Part 2.1.3 indicates a 40 mil geomembrane liner will be used. This discrepancy should be resolved.

14. Section 15195, Page 8, Part 3.2.3.

This part lists pipe pressure testing requirements in terms of the maximum working pressure. However, since the working pressure is not given, the test pressure will not be clear to the Contractor. In Part 2.2.2 PE pipe is stated to have a working pressure of 100 psi. However, the terminology between Part 2.2.2. and this part is confusing. The maximum expected working pressure of the propane piping should be stated. Then the pressure rating of the PE pipe should be checked to make sure the pipe pressure rating is above the test pressure.