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C49-3-8-151

March 19, 1998

Brown & Root Environmental Project Number 7330

Mr. Lance Laughmiller  
Atlantic Division  
Naval Facilities Engineering Command  
Code 1823  
6500 Hampton Boulevard  
Norfolk, Virginia 23508

Reference: CLEAN Contract No. N62472-90-D-1298  
Contract Task Order No. 266

Subject: Draft Response to Comments - Field Sampling Plan (Master)  
Marine Corps Air Station, Cherry Point, North Carolina

Dear Mr. Laughmiller:

Enclosed are 2 copies of the Draft Response to Comments (RTC) for the Field Sampling Plan (Master). I have also sent 3 copies to J. Bassett, 2 copies to L. Raynor, 1 copy to B. Powers, 1 copy to R. Johnson, 1 copy to S. Bivone, and 1 copy to D. Bitterman.

In order to meet the April 30, 1998 anticipated date for issuing the FSP all outstanding issues will require resolution by April 9, 1998. Brown & Root Environmental will contact the Partnering Team member for each organization on April 9, 1998 to reach consensus on outstanding issues in the RTC letter. If areas of disagreement still exist after these conversations, we will present only those issues to you for further resolution guidance at that time. All of the resolutions will be reflected in the final RTC letter which will be provided along with a copy of the deliverable.

If I can be of any assistance or if you have any questions, please do not hesitate to call me at (412) 921-8544.

Sincerely,

Mark R. Francis  
Project Manager

MRF/gp

Enclosures

Lance, 3/19/98  
This is what we  
had proposed to send  
out for the FSP. Please  
call with any  
comments.  
cc: Bill & Rachel THX  
Mark F.



Mr. Lance Laughmiller  
Atlantic Division  
Naval Facilities Engineering Command  
March 19, 1998 - Page Two  
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cc: Mr. Roger Boucher, NORTHDIV (w/o enclosure)  
Mr. Bill Powers, MCAS Cherry Point (w/enclosure)  
Ms. Rachel Johnson, MCAS Cherry Point (w/enclosure)  
Mr. Jay Bassett, USEPA (w/enclosure)  
Ms. Linda Raynor, NCDENR (w/enclosure)  
Mr. Steve Bivone, OHM (w/enclosure)  
Mr. Doug Bitterman, CH<sub>2</sub>M Hill (w/enclosure)  
Mr. John Trepanowski, B&R Environmental (w/enclosure)  
Mr. Daryl Hutson, B&R Environmental (w/o enclosure)  
Mr. Matt Cochran, B&R Environmental (w/enclosure)  
Mr. Greg Zimmerman, B&R Environmental (w/enclosure)  
Mr. Kim Turnbull, B&R Environmental (w/enclosure)  
Ms. Daneen Resnick, B&R Environmental (w/enclosure)  
File: CTO 266 (w/enclosure)

**DRAFT RESPONSE TO COMMENTS  
MARCH, 1998  
FIELD SAMPLING PLAN (Revision 0 August 1997)  
MCAS CHERRY POINT, NORTH CAROLINA**

**COMMENTS RECEIVED FROM NC SUPERFUND SECTION - JANUARY 7, 1998  
(All of the comments received refer to the SOPs contained in Appendix C)**

**1. CT-04 Sample Nomenclature**

**5.4 Example**

**130-MW-003-F1-01 - describes a "filtered" groundwater sample**

Response:

Agree. The example provided already indicates what is presented in the comment.

**2. SA-1.1 Groundwater Sampling - 3 of 27**

**5.1 General**

**3.0 - Note: If LNAPLs are suspected, obtain sample from the top of the water column (same as the purge). If DNAPLs are suspected, sample from the bottom of the well.**

Response:

Agree. The following will be hand-written as the last sentence of Section 5.1 on page 4 of 27 of SOP SA-1.1, "If LNAPLs are suspected, obtain the sample from the top of the water column (same as the purge). If DNAPLs are suspected, sample from the bottom of the well. Both procedures should use the LNAPL and DNAPL equipment listed in Section 5.7.2."

**5.4.1 Evacuation (General)**

**We typically try to get turbidity below 10 NTUs before sampling not stabilized.**

Response:

Agree. However, this level is not generally achievable at MCAS Cherry Point. No changes to the text are proposed.

**3. SA-1.3 Soil Sampling**

**5.4 Near Surface Soil Sampling**

**3. Section 5.3 only has steps 2 through 5**

Response:

Agree. SOP SA-1.3 (updated version 2/10/98) corrects this discrepancy on page 8 of 19.

**5.5 OVA or HNO should be used to monitor odors when using an auger.**

Response:

Agree. The site-specific Health and Safety Plan (HASP) will indicate appropriate instrument use in accordance with SOP ME-12.

**5.5 11. Follows steps 4 and 5 not 4 through 10**

Response:

Agree. SOP SA-1.3 (updated version 2/10/98) corrects this discrepancy on page 9 of 19.

**5.6 4. Follows steps 4 and 5 not 4 through 10**

Response:

Agree. SOP SA-1.3 (updated version 2/10/98) corrects this discrepancy on page 9 of 19.

**4. SA-2.5 Ground Penetrating Sampling Techniques**

**5.2 Sample Equipment**

**Use acetate lines only if they will not possibly interfere with chemicals of interest.**

Response:

Agree. The site-specific FSP will identify if use of acetate lines may interfere with chemicals of interest.

**5. SA-6.1 Sample Handling**

**5.3 Field Filtration (We don't)**

**If filtering is allowed, usually waste approx. 500 ml of filtrate before filling sample containers.**

Response:

Agree. On page 6 of 23 of SOP SA-6.1, Section 5.3 reads, "At times, field-filtration may be required...". Field filtering is not conducted at MCAS Cherry Point at the present time. It is noted, however, that sample is lost during this procedure. No changes to the text are proposed.

**6. SA-7.1 Deconning of Equipment**

**5.3 Field Analytical Equipment**

**5.3.1 Water Level Indicators**

**We usually do 1. detergent wash; 2. tap rinse; 3. DI rinse.**

Response:

Agree. The SOP will be changed in accordance with the comment.

**DRAFT RESPONSE TO COMMENTS  
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MCAS CHERRY POINT, NORTH CAROLINA**

**COMMENTS RECEIVED FROM OHM - NOVEMBER 18, 1997**

- 1. The document does not provide the Navy's requirements for field QC. Field QC belongs in the FSP, not the QAP.**

Response:

Agree. Detailed Field QC requirements are not provided in the Master Field Sampling Plan (FSP).

Do not agree. The intent of the Master Planning Document series (including the FSP and Master Quality Assurance Plan [QAP]) is to create consistent guidance in one document. Having the same information repeated in two different texts can lead to inconsistencies when changes are made at a later date. Field related quality control samples are part of the Data Quality Requirements section required as part of the QAP.

- 2. The document may not be used if the project-specific requirements are not included. It would be redundant to have to produce a project-specific FSP.**

Response:

Do not agree. The intent of the Master Planning Document series (including the Master Field Sampling Plan) is to create consistent and approved guidance in one document so that only the site-specific characteristics and procedures not already outlined in the Master FSP have to be written for the site-specific FSP. There should be no redundancy at all. If the information in the Master FSP is sufficient for the site-specific FSP it does not have to be repeated. Use of this concept should expedite site-specific FSP production, avoid inconsistencies in approach, and save money.

To further reinforce the Master FSP concept, the introduction will be modified as follows (changes underlined):

"This Field Sampling Plan (FSP) outlines the standard field procedures to be used for investigations, as well as remedial activities, conducted at Marine Corps Air Station (MCAS) Cherry Point. The FSP specifies requirements for any field work that may be undertaken at MCAS Cherry Point and serves as a guide for use in the field by all members of the field teams. A site or project-specific FSP detailing project-specific objectives, sampling locations, rationale, and other unique issues for the particular job will be written for each task-specific project. As noted in the preface, these site-specific Work Plans (sometimes referred to as Sampling and Analysis Plans) will include the scoping rationale as outlined in

the Decision Process Document, identify the appropriate SOPs from this FSP, and identify the appropriate quality assurance requirements from the Quality Assurance Plan (QAP). Investigations will comply with applicable North Carolina and United States Environmental Protection Agency (U.S. EPA) regulations."

- 3. A way to make this a usable document is to provide it to contracting in electronic format so that sections that are not applicable to the project are deleted. The project-specific requirements can then be incorporated into the FSP and submitted. This would ensure that the Navy's guidelines and requirements are incorporated into FSPs. Also suggest formatting the document so that it looks like a project-specific FSP. Add in boxes to describe what and where project-specific requirements would be inserted. Better yet, build the document as a template so that the contractor can pick and choose the applicable parts.**

Response:

Do not agree. The text of the Master FSP will only be changed as a result of Partnering Team review or instructions - not by contractors using them to create site-specific FSPs. The site-specific FSP will describe specific sampling actions and locations but will not repeat standardized, approved procedures already described in the Master FSP. Electronic versions are not needed by contractors and provision of them could lead to inconsistent procedures at MCAS Cherry Point. The Partnering Team will consider the template idea for use in preparing site-specific FSPs.

- 4. Compositing techniques/procedures are not discussed.**

Response:

Do not agree. Compositing is discussed in Sections 3.0, 5.2.2, and 5.7.3.3.

- 5. Discuss the differences or define composite and grab samples.**

Response:

Do not agree. SOP SA-1.3 (updated version 2/10/98 and existing version 3/1/96) defines composite and grab samples on page 2 of 19.

- 6. We will need to still produce the field specific documents. These are too vague to be useful for the field personnel.**

Response:

Agree. The intent of the Master Planning Document series (including the Master Field Sampling Plan) is to create consistent and approved guidance in one document so that only the site-specific characteristics and procedures not already outlined in the Master FSP have to be written for the site-specific FSP. If the information in the Master FSP is sufficient for the site-specific FSP it does

not have to be repeated. Use of this concept should expedite site-specific FSP production, avoid inconsistencies in approach, and save money.

Do not agree that the Master FSP is too vague to be useful for field personnel.

- 7. Section 5.2.1 - Procedure for collecting volatiles will need to be updated for low level analysis per new SW846 methods.**

Response:

Agree. Presuming that the commenter was referring to SOP SA-1.3, the noted update was included in Section 5.2.1 on page 4 of 19 of the latest revision dated 2/10/98.

- 8. Numbering system may not be practical for our Data Management system. This would be determined in the Field Specific FSP and spelled out then.**

Response:

Agree. A place marker for Section 3.0 "RAC Field Operations" has been created in the Master FSP. It is agreed that input from the RAC contractor is needed and will be scoped by LANTDIV at a later date.

- 9. I have not looked at the well installation section. I'll try to get Collins or Steve to look at it.**

Response:

No additional information or comments were received regarding this comment.

- 10. (Name illegible) also looked at the FSP and has some good ideas or suggestions.**

Response:

No additional information or comments were received regarding this comment.

**DRAFT RESPONSE TO COMMENTS  
MARCH, 1998  
FIELD SAMPLING PLAN (Revision 0 August 1997)  
MCAS CHERRY POINT, NORTH CAROLINA**

**COMMENTS RECEIVED FROM KHAFRA - OCTOBER 27, 1997**

**General Comment 1**

**Table of Contents, Page iv, does not have sections addressing the Site background, sampling objectives and sample location and frequency. The aforementioned sections should be included in the document.**

**Response:**

Do not agree. The intent of the Master Planning Document series (including the Master Field Sampling Plan [FSP]) is to create consistent and approved guidance in one document so that only the site-specific characteristics, objectives, locations, frequencies and other procedures not already outlined in the Master FSP have to be written for the site-specific FSP. The specific details mentioned in the comment would be addressed in a site-specific FSP. Use of this concept should expedite site-specific FSP production, avoid inconsistencies in approach, and save money.

To further reinforce the Master FSP concept, the introduction will be modified as follows (changes underlined):

"This Field Sampling Plan (FSP) outlines the standard field procedures to be used for investigations, as well as remedial activities, conducted at Marine Corps Air Station (MCAS) Cherry Point. The FSP specifies requirements for any field work that may be undertaken at MCAS Cherry Point and serves as a guide for use in the field by all members of the field teams. A site or project-specific FSP detailing project-specific objectives, sampling locations, rationale, and other unique issues for the particular job will be written for each task-specific project. As noted in the preface, these site-specific Work Plans (sometimes referred to as Sampling and Analysis Plans) will include the scoping rationale as outlined in the Decision Process Document, identify the appropriate SOPs from this FSP, and identify the appropriate quality assurance requirements from the Quality Assurance Plan (QAP). Investigations will comply with applicable North Carolina and United States Environmental Protection Agency (U.S. EPA) regulations."

**General Comment 2**

**Section 2.1, Page 2-1, Paragraph 2 identifies a typical conceptual site model for MCAS Cherry Point to better demonstrate the data collection methodologies and to demonstrate possible contaminant pathways depicted on Figure 2-1. However, the conceptual site model (CSM) depicted on Figure 2-1 does not provide all the elements for a flow diagram of a CSM. According to EPA guidance for conducting RI/FS, the CSM should provide information on the waste sources pathways, and receptors at a site. This information is used to evaluate potential risk to humans and the environment. The model should include known and suspected sources of contamination, known and potential routes of migration, and known or potential human and environmental receptors. In addition, the model should be used to assist in identifying locations where sampling is necessary and assist in the identification of potential remedial technologies.**

Response:

Agree. Conceptual Site Models (CSMs) for human health and ecological risk assessments are provided in the Decision Process Document (DPD) as Figures B-2, B-3, C-1, and C-2. The DPD is one of 4 documents currently in the Master Planning Document series (including the Master Field Sampling Plan [FSP]). These figures (or others deemed more suitable) will be used to create site-specific CSMs with more detailed information as noted in the comment. However, the Master FSP will not duplicate the presentation of CSMs already provided in the DPD. The CSM in the FSP will be removed.

### General Comment 3

**Section 2.1, Page 2-1, Paragraph 2 briefly discusses investigation objectives as a part of the conceptual site model which is discussed in greater detail in the Decision Document (DD). However, the text does not fully clarify sampling objectives as stated in the EPA guidance on conducting RI/FS. The guidance document states that the sampling objectives should be specific objectives of a sampling effort that describe the intended uses of data and should be clearly and succinctly stated. The text should clearly re-state the sampling objectives in this section.**

Response:

Do not agree. As noted in the response to general comment number 1, the intent of the Master Planning Document series (including the Master Field Sampling Plan [FSP]) is to create consistent and approved guidance in one document so that only the site-specific characteristics, objectives, intended use of data, locations, frequencies, etc. not already outlined in the Master FSP have to be written for the site-specific FSP. The specific details mentioned in the comment would be addressed in a site-specific FSP. Use of this concept should expedite site-specific FSP production, avoid inconsistencies in approach, and save money.

### General Comment 4

**Section 2.9, Pages 2-17 through 2-20 discuss general sampling operations for groundwater, surface water and soil sampling. However, a list is not provided itemizing the equipment to be used and the material composition of the equipment for sampling the different media. The aforementioned list should be addressed per EPA guidance.**

Response:

Do not agree. As noted in the response to general comment number 1, the intent of the Master Planning Document series (including the Master Field Sampling Plan [FSP]) is to create consistent and approved guidance in one document so that only the site-specific characteristics, objectives, intended use of data, locations, frequencies, itemized equipment lists, etc. not already outlined in the Master FSP have to be written for the site-specific FSP. The specific details mentioned in the comment would be addressed in a site-specific FSP. Use of this concept should expedite site-specific FSP production, avoid inconsistencies in approach, and save money.

### Specific Comment 1

**Section 2.9.1, Page 2-18, Paragraph 5, Sentence 1. The text states that groundwater at Cherry Point will be sampled in accordance with Section 7.2.3 of EPA's EISOPQAM (US EPA, May, 1976). However, the latest version of the EPA EISOPQAM is May, 1996 and not 1976. The discrepancy should be corrected**

accordingly.

Response:

Agree. The typo will be corrected.

#### Specific Comment 2

**Section 2.14.2, Page 2-24, Paragraph 5, Sentence 1. The text states that field analytical equipment will be rinsed with steamed distilled water, deionized water, and then with the sample liquid. However, there is no reason why the probe should be rinsed with the sample liquid. The text should give the rationale for rinsing the probe with the sample liquid after it has already been rinsed with deionized water.**

Response:

Agree. The reference to rinsing with the sample liquid will be deleted.

#### Specific Comment 3

**Section 2.15, Page 2-25, Paragraph 1. The text states that disposable Personal Protective Equipment (PPE) will be placed in heavy plastic garbage bags, tied securely and disposed of in the trash receptacle at the EAD facility. However, analysis of the media is required before disposal in a trash receptacle. Plastic garbage bags may not have the strength to prevent possible damage which can result in release of contaminants. Therefore, alternative or other actions for the safe disposal of PPE should be considered. The text should be revised accordingly.**

Response:

Agree. The text will be modified as follows: "Disposable PPE will be decontaminated in accordance with the site-specific HASP and then will be placed in heavy plastic...."..