

3/14/02-04048

Baker

Baker Environmental, Inc.

A Unit of Michael Baker Corporation

Airport Office Park, Building 3
420 Rouser Road
Coraopolis, Pennsylvania 15108

(412) 269-6000
FAX (412) 269-2002

March 14, 2002

Commander
Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street (Building N-26)
Norfolk, Virginia 23511-2699

Attn: Mr. Kirk Stevens
Code EV23KAS

Re: Contract N62470-95-D-6007
Navy CLEAN, District III
Contract Task Order (CTO) 0143
Phase II Confirmatory Sampling Investigation and
Base Background Groundwater Investigation
MCB, Camp Lejeune, North Carolina

Dear Mr. Stevens:

Baker Environmental, Inc. (Baker) is pleased to submit replacement pages for the Phase II Confirmatory Sampling Investigation Work Plan and the Base Background Groundwater Investigation Work Plan. Once these replacement pages and covers are inserted into the Draft document, the work plans will be considered final. Complete copies of the Final Quality Assurance Project Plan and Final Health and Safety Plan are included for your files. In addition, one complete, unbound copy of each of these documents has been forwarded for the Administration Record.

Three copies of the replacement pages and the Final Quality Assurance Project Plan and the Final Health and Safety Plan were forwarded to Mr. Rick Raines at the Environmental Management Department MCB, Camp Lejeune. Additionally, two copies have been forwarded to Mr. David Lown and Ms. Beth Hartzell of the North Carolina Department of Environment and Natural Resources (NC DENR), as presented in the attached transmittal letter.

Attachment A contains replacement pages for the Base Background Groundwater Investigation Work Plan. Attachment B includes replacement pages for the Phase II Confirmatory Sampling Investigation Work Plan and Attachment C includes our response to NC DENR's comments on the Draft Project Plans.

We appreciate the opportunity to serve LANTDIV on this project. Should you have any questions regarding this submittal, please contact me at 412-269-2098 (email: jculp@mbakercorp.com) or in my absence, Mr. Rich Bonelli at 412-269-2033.

Sincerely,

BAKER ENVIRONMENTAL, INC.



James S. Culp
Project Manager

JSC/lp
Enclosures

cc: Mr. Rick Raines, MCB Camp Lejeune (w/attachment)
Mr. Christopher Bozzini, CH2M Hill (w/attachment)
Mr. Scott Bailey, CH2M Hill (w/o attachment)
Ms. Lee Anne Rapp, P.E., LANTDIV, Code EV31LAR (w/o attachment)
Ms. Beth Collier, LANTDIV, Code AQ115 (w/o attachment)



Letter of Transmittal

To: NC DENR
 Division Of Solid Waste Management
 401 Oberlin Road - P.O. Box 27687
 Raleigh, NC 27605

S.O. No. 26007-143-0000-04102
 Project: Phase II Confirmatory Sampling Investigation
 and Base Background Groundwater Investigation
 Date: March 14, 2002

Attn: Mr. David J. Lown, L.G., P.E.

We are forwarding the following: Attached Under Separate Cover

DWG. NO.	NO. COPIES	TITLE OR DESCRIPTION	COMMENTS
	2	Replacement Pages for Base Background Groundwater Investigation Work Plan	
	2	Replacement Pages for Phase II Confirmatory Sampling Investigation Work Plan	
	2	Final Quality Assurance Project Plan	
	2	Final Health and Safety Plan	

THESE ARE TRANSMITTED as checked below:

- | | | |
|--|---|---|
| <input type="checkbox"/> As requested | <input type="checkbox"/> No exceptions taken | <input type="checkbox"/> Revise and resubmit |
| <input checked="" type="checkbox"/> For review and comment | <input type="checkbox"/> Rejected - See remarks | <input type="checkbox"/> Submit specified items |
| <input type="checkbox"/> For your information | <input type="checkbox"/> Proceed subject to corrections noted | <input type="checkbox"/> _____ |

GENERAL COMMENTS:

One copy has been included for Ms. Beth Hartzel.

cc: Mr. Kirk Stevens, Code EV23 - LANTDIV
 Mr. Christopher Bozzini, P.E. - CH2M Hill

BAKER ENVIRONMENTAL, INC.

By: James S. Culp

Title: Project Manager

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ATTACHMENT C

February 8, 2002

Commander, Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street (Building N-26)
Norfolk, Virginia 23511-2699

Attention: Mr. Kirk Stevens
Navy Technical Representative
Code EV23

RE: NC Comments Draft Phase II Confirmatory
Sampling Investigation Work Plan and
Draft Base Background Groundwater Study Work Plan
MCB Camp Lejeune

Dear Mr. Stevens:

The North Carolina Superfund Section has reviewed these documents and our comments are attached. If you have any questions, please call.

Sincerely,

David J. Lown, LG, PE
Geological Engineer
Superfund Section

Attachments

cc: Gena Townsend, USEPA
Neal Paul, MCB Camp Lejeune

NC Comments
Draft Phase II Confirmatory Sampling Investigation Work Plan
February 8, 2002

1. The well abandonment plans outlined in the report appear to comply with **15A NCAC 02C .0113 Abandonment of Wells**. The most recent version of this regulation can be found at the Division of Water Quality website:
<http://gw.ehnr.state.nc.us/>.
2. SWMU 254. Figure 4-5. The proposed locations of the monitoring wells are not shown on the map.
3. SWMU 256. One of the surface soil samples should be located upstream from the oil/water separator.
4. SWMU 258. Figure 4-8. The purpose of having three monitoring wells is to ensure that the groundwater flow direction is known. If the wells are in a linear pattern, it is difficult to make this determination. Proposed wells at this SWMU are in a linear pattern. A triangular pattern is necessary to determine groundwater flow direction.
5. SWMU 264. Figure 4-10. The proposed monitoring well locations do not test the pentachlorophenol found in sample SWMU264-SS01-00.
6. SWMU 285. Figure 4-15. Same comment as for SWMU 258 (Comment 4).
7. SWMU 314. Table 4-2. Why are VOCs included in the sample analyses summary for this SWMU?
8. SWMU 319. Figure 4-36. Where is the location of the proposed soil boring?

NC Comments
Draft Base Background Groundwater Study Work Plan
February 8, 2002

Sections 1.1 and 3.1.1 state "...the data will be used to assess whether inorganics detected in groundwater samples collected during future investigations are attributable to activities at the Base, are naturally occurring, or are of anthropogenic origin." This may be an overstatement. While I agree that this would be a nice goal, I don't believe that the proposed study can do this. Being able to determine the source of inorganics will require more work than is being proposed. The purpose of this study is to produce a background database, so that a determination can be made with respect to inorganic levels in groundwater at specific sites. The causes of basewide inorganic levels may be the subject of future investigations. If the inorganic levels found in groundwater at a site are at basewide levels, it doesn't make sense to propose remediation activities for the site, regardless if the inorganics are from Base activities, other anthropogenic causes or are naturally occurring.

Response to Comments on the Phase II SWMU Confirmatory Sampling Investigation Work Plans, MCB Camp Lejeune submitted by Mr. David J. Lown, North Carolina Department of Environment and Natural Resources, Superfund Section, on February 8, 2002

1. We have reviewed the most recent version **15A NCAC 02C.0113 Abandonment of Wells** and have determined that our procedures described in the Phase II SWMU Confirmatory Sampling Work Plans comply with this regulation.
2. SWMU 254. The figure will be adjusted accordingly and the proposed locations will be identified.
3. SWMU 261 (not 256). A phone conversation with Mr. David J. Lown on 2/15/02 verified that SWMU 261 not SWMU 256 was applicable to his comment. An upstream surface soil sample is not possible at SWMU 261 because SWMU261-SS01 was taken right at the discharge pipe from the oil/water separator. However, a note will be added to the figure explaining that SWMU261-SS02, SS03 and TW03 will be located down gradient to delineate any migration of contaminants found in sample SWMU261-SS01.
4. SWMU 258. The proposed well locations were positioned to define and confirm the exceedences from the Phase I sampling. We suggest using the monitoring well (78-GW02) installed as part of the Site 78 groundwater monitoring program to establish groundwater flow direction at this SWMU. This well is located within 150 ft. west of SWMU 258 and can be used in conjunction with the proposed monitoring wells for the sole purpose of establishing groundwater flow.
5. SWMU 264. The proposed monitoring well SWMU264-TW03 will be moved near location SWMU264-SS01-00. Surface soil, subsurface soil and groundwater samples will be collected from this location and analyzed for Pentachlorophenol as suggested.
6. SWMU 285. The three wells will be adjusted accordingly to determine groundwater flow at this SWMU. The temporary wells were initially positioned to determine the extent of contamination detected in soil boring SWMU285-IS03. However, the adjustment needed in the locations of the wells to achieve groundwater flow data should not hamper the ability of these wells to determine the extent of contamination (if any) from boring SWMU285-IS03.
7. SWMU 314. Table 4-2 will be corrected and VOCs will not be included in the sample analyses summary for this SWMU.
8. SWMU 319. A note will be added to the figure indicating that the boring will be field located in the vicinity of the former SWMU. This SWMU was demolished as part of the Route 17 By-pass through Camp Geiger. Therefore there are no buildings or structures to use as landmarks to precisely locate a boring in the vicinity of borings SWMU319-IS01 or SWMU319-IS03. We did not include the location on the figure because it may give the impression that we will be able to identify the proposed location in the field.

**Response to Comments on the Draft Base Background Groundwater Study Work Plans,
MCB Camp Lejeune submitted by Mr. David J. Lown, North Carolina Department of
Environment and Natural Resources, Superfund Section, on February 8, 2002**

1. We agree with the comment and it will be incorporated into the text.