

Arnold CIV Johanna E

From: Bruce Reed [Bruce.Reed@ncmail.net]
Sent: Monday, February 16, 2009 8:22 AM
To: Arnold CIV Johanna E
Subject: Re: LCH-4015 soil sample near MW1

Johanna:

Thanks for sending the information, and reminding me. Report recommendations now ok-no need to resample at this time unless the Base wants to. Since it has been 4 years, you may want to consider working just a few soil samples into the next AMR.

Regards,

Bruce Reed

Arnold CIV Johanna E wrote:

> Bruce,
> I forgot to ask you about the LCH-4015 soil samples near MW1
yesterday.
>
> I found the mentioned report on our web portal. Title: Report of
> Findings for Soil and Free-Phase Product Assessment for Building
> LCH-4015 and LCH-4034; Date: December 16, 2004; Author: CATLIN
>
> CATLIN staff indicated that SB39 is only about 5 feet from MW1 and
> soil analyses were below action levels. Please see attached Figure 2D
> (soil
> results) with the analyticals in the insert. Zoom in to 300% and the
> insert becomes legible.
>
>
> Please let me know whether we need more soil samples around MW1.
>
> Thanks, V/R Johanna
>
> Johanna E. Arnold, Ph.D.
> Environmental Control Specialist
> Camp Lejeune EMD/EQB
> phone: 910-451-9114
> Fax: 910-451-5997
>
>
>

--

Bruce Reed
Hydrogeologist II
NCDENR, DWM, UST Section
ph 910.796.7400 fx 910.350.2004

--

NOTICE: E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

Arnold CIV Johanna E

From: Bruce Reed [Bruce.Reed@ncmail.net]
Sent: Tuesday, February 10, 2009 11:43 AM
To: Arnold CIV Johanna E
Subject: LCH-4015 Soil Sampling Reprot

Johanna:

The Division has reviewed the soil results from the former fueling area at the subject site as presented in a report received on February 9, 2009. Please re-sample the soil from the immediate area around MW-1 (previous sample was 4,611 mg/kg), then we will advise on your consultant's recommendations found in the subject report. Due date is April 10, 2009.

Thanks,

Bruce Reed

--

Bruce Reed
Hydrogeologist II
NCDENR, DWM, UST Section
ph 910.796.7400 fx 910.350.2004

--

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**State of North Carolina
Department of Environment
and Natural Resources
Wilmington Regional Office
Division of Waste Management
UST Section**



**Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Director**

August 4, 2008

Commanding Officer
Attn: I&E/EMD/EQB, Dr. Johanna Arnold-
UST Program Mgr., Bldg. 12
PSC Box 20004
MCB Camp Lejeune, NC 28542-0004

Subject: Review of Annual Monitoring Report
USMC Camp Lejeune
Bldg. LCH-4015
Camp Lejeune, Onslow County
Incident No. 85352, Risk: Low

Dear Dr. Arnold:

Thank you for submitting the subject report to this office on July 21, 2008. The UST Section has reviewed this report and offers the following comments:

- The recommendations within the report are approved. Sampling of the following wells will suffice during the next year: MW-1, 2, 20, 21, and 23, for EPA Methods 602/625 plus ipe and mtbe. Please run lead on MW-1. If you happen to monitor MW-3, please run lead on that sample also.
- Please look at all the soil data on this site, and at all source areas, as soil data indicates exceedances as presented in the 2004 Remedial Action Optimization & Revised Corrective Action Plan. As communicated on March 13, 2008, please also advise whether any assessment under the former fueling area (concrete pad) near MW-1 which had 4,611 mg/kg in November 1994. Results should be presented in a Soil Assessment Report, or a Soil Cleanup Report if the soil is below action levels. The soil report is due by December 5, 2008.

If you have any questions concerning this letter, please contact me at (910) 796-7400.

Sincerely,

Bruce Reed
Hydrogeologist II

Cc: WiRO-UST

s:\bruce\arnold4015-08.amr

127 Cardinal Drive, Wilmington, North Carolina 28405

Phone: 910-796-7215 / Fax: 910-350-2004 / Internet: www.enr.state.nc.us

Marine Corps Base Camp Lejeune
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FROM: DIRECTOR

TO: EQB

RETURN:

COPY:

SUBJECT: REVIEW OF ANNUAL MONITORING REPORT BLDGS TT-2477/2478, M232-236, LCH-4015

COMMENTS:

Bynum, for Tolama's action - gee

ROUTING: Originator: J LEDFORD Initials: JCL Date: 7/8/2008

1. CAPT ENGSTROM Initials: *gee* Date: 7/8/08

2. Initials: Date:

3. Initials: Date:

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AUG 07 2008

*original to Tolama
8/7/08*

State of North Carolina
Department of Environment
and Natural Resources
Wilmington Regional Office
Division of Waste Management
UST Section

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Director



November 1, 2007

Commanding Officer
Attn: I&E/EMD/EQB, Dr. Johanna Arnold-
UST Program Mgr., Bldg. 12
PSC Box 20004
MCB Camp Lejeune, NC 28542-0004

Subject: Review of Report Entitled Soil and
Groundwater Investigation
Summary Report
USMC Camp Lejeune
Bldg. LCH-4015
NC Highway 24: Main Gate Area
Camp Lejeune, Onslow County
Incident No. 85352

Dear Dr. Arnold:

Thank you for submitting the subject report to this office on October 30, 2007. The UST Section has reviewed this report and offers the following comments:

- The recommendations within the report are approved. The soil excavation should be performed as soon as possible, but in no case later than March 1, 2008. Please notify us 48 hours in advance of the excavation date and time. Also, the monitoring may be performed semi-annually instead of quarterly.

If you have any questions concerning this letter, please contact me at (910) 796-7400.

Sincerely,

Bruce Reed
Hydrogeologist II

Cc: WIRO-UST

s:\bruce\arnold4015.nov

NOV 02 2007

Marine Corps Base Camp Lejeune
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Review

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TO: EQB

Incoming

Signature

RETURN:

COPY:

SUBJECT: REVIEW OF REPORT ENTITLED SOIL AND GROUNDWATER INVESTIGATION SUMMARY REPORT

COMMENTS: Bryan / Scott / Johanna
yours for action.
JT

ROUTING: Originator: J LEDEFORD Initials: JCL Date: 11/2/2007
1. J TOWNSON Initials: JMT Date: 11/2/07
2. Initials: Date:
3. Initials: Date:

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Scott HAS copy
11/02/07



North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor
William G. Ross Jr., Secretary

Division of Waste Management
Underground Storage Tank Section

Dexter R. Matthews, Director

August 7, 2007

CERTIFIED MAIL 7004251000182796754
RETURN RECEIPT REQUESTED

Commanding Officer
I&E EMD Bldg. 1 (Attn: Mr. John R. Townson, Director)
Marine Corps Base
PSC Box 20004
Camp Lejeune, NC 28542-0004

Re: Notice of Violation of Title 15A NCAC Subchapter 2L
Corrective Action

USMC Camp Lejeune Bldg. LCH-4015
NC Highway 24
Camp Lejeune, Onslow County
Incident Number: 85352
Ranking: Intermediate (I110)

Dear Mr. Townson:

Information received by this office on September 29, 1999 confirms a release or discharge from an aboveground storage tank system at the above-referenced location. This office has determined that the United States Marine Corps (USMC) is a responsible party. This letter explains the violation(s) and associated corrective action(s) the USMC must take as a result of the release or discharge in accordance with North Carolina statutes and rules. The Division of Waste Management, UST Section, administers the required response for petroleum releases, in accordance with the General Statute 143.215.75 et seq., the Oil Pollution and Hazardous Substances Control Act, and with Title 15A NCAC Subchapter 2L, Groundwater Classifications and Standards.

VIOLATION 1:

Failure to implement the Corrective Action Plan (Revised) and schedule, which were approved by the Division of Water Quality on June 14, 2004, in accordance with Title 15A NCAC 2L .0106(c) and (h). The treatment system was shutdown on June 8, 2007, without regulatory approval.

REQUIRED CORRECTIVE ACTION:

Based on the determination that the risk posed by the discharge or release at the subject site is intermediate, the USMC must comply with cleanup requirements pursuant to Title 15A NCAC 2L .0106(c) and (h). Please implement the Corrective Action Plan and schedule in accordance with Title 15A NCAC 2L .0106(c) and (h), and the most recent version of the UST Section Guidelines for the Investigation and Remediation of Contamination from Non-UST Petroleum Releases. The Corrective Action Plan must be implemented within 45 days of the date of receipt of this notice.

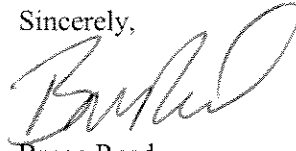
Please take the corrective action(s) for the above violation(s) as necessary to bring the site into compliance. Corrective actions must be taken and reported to the Wilmington Regional Office, within 30

days from the date of this notice, unless otherwise noted in the above corrective actions, to avoid recommendation of civil penalties for continuing violations.

Penalties may be assessed for the violation(s) described within this Notice of Violation. Your prompt attention to the items described herein is required. Failure to comply with the State's rules, in the manner and time specified, may result in the assessment of additional civil penalties and/or the use of other enforcement mechanisms available to the State. Each day that a violation continues may be considered a separate violation.

If you have any questions regarding the actions that must be taken or the rules mentioned in this letter, please contact me at the address or telephone number listed below.

Sincerely,



Bruce Reed
Hydrogeologist II
Wilmington Regional Office

cc: George O'Daniel, Onslow County Health Department
WiRO-UST

UST Regional Offices

Asheville (ARO) – 2090 US Highway 70, Swannanoa, NC 28778 **(828) 296-4500**

Fayetteville (FAY) – 225 Green Street, Suite 714, Systel Building, Fayetteville, NC 28301 **(910) 433-3300**

Mooresville (MOR) – 610 East Center Avenue, Suite 301, Mooresville, NC 28115 **(704) 663-1699**

Raleigh (RRO) – 1628 Mail Service Center, Raleigh, NC 27699 **(919) 791-4200**

Washington (WAS) – 943 Washington Square Mall, Washington, NC 27889 **(252) 946-6481**

Wilmington (WIL) – 127 Cardinal Drive Extension, Wilmington, NC 28405 **(910) 796-7215**

Winston-Salem (WS) – 585 Waughtown Street, Winston-Salem, NC 27107 **(336) 771-5000**

Guilford County Environmental Health, 1203 Maple Street, Greensboro, NC 27405, **(336) 641-3771**

S:\bruce\smith4015-2.nov

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FROM: DIRECTOR

TO: ECB

EQB

RETURN:

SUBJECT: NOTICE OF VIOLATION

COMMENTS:

*Bryon/Andrew - please provide response addressing this NOA to me by Aug 23
JT*

ROUTING: Originator: J LEFORD Initials: JCL Date: 8/13/2007

1. JT Initials: JNT Date: 8/17/07

2. _____ Initials: _____ Date: _____

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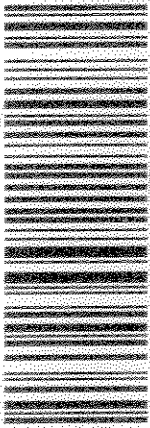
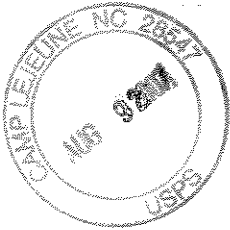
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8/17/07
AUG 17 2007*

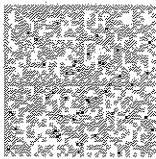
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NCDENR-US1
127 Cardinal Drive Ext.
Wilmington, NC 28405



7004 2510 0001 8279 6754

Commanding Officer
I&E EMD Bldg. 1
Attn: Mr. John R. Townson, Director)
Marine Corps Base
PSC Box 20004
Camp Lejeune, NC 28542-0004



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Wilmington Regional Office
Division of Waste Management
UST Section



Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Director

August 7, 2007

Commanding Officer
Attn: I&E/EMD/EQB (Mr. Andrew Smith, Bldg. 12)
PSC Box 20004
MCB Camp Lejeune, NC 28542-0004

Subject: Review of Report Entitled
"Annual Groundwater Monitoring
Report 2006-2007
Building LCH-4015"
NC Highway 24
Camp Lejeune, Onslow County
Incident No. 85352
Risk Ranking: I 110

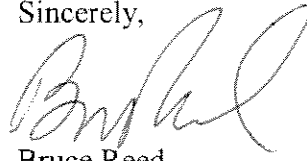
Dear Mr. Smith:

Thank you for submitting the subject report to the Division on June 29, 2007. The Division has reviewed the report and offers the following comments:

- It was recommended on Page 10 that the treatment system be shut down on June 1, 2007. First of all, the report was dated June 14, 2007. Secondly, as of the last soil-sampling event, contaminated soils, both gasoline and diesel range organics, still exist at the site. The Division can not allow termination of the treatment system with contaminated soils above regulatory action levels. Groundwater contamination is still present at the site, and contaminated soil is regarded as a secondary source of groundwater contamination. A separate letter will be sent regarding the system.
- The Division disagrees with the statement on Page 9 that vadose zone soils at the site do not require additional remediation at this time.
- The referenced gauging and sampling of site wells in the referenced months (July, August, and December 2007) are not necessary. Please continue with semi-annual monitoring. Gauging for free-product can also be done according to this schedule. Please include gauging of the temporary piezometers if they are still on site.

If you have any questions concerning this letter, please contact me at (910) 796-7400.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bruce Reed".

Bruce Reed
Hydrogeologist II

cc: WIRO-UST

s:\bruce\smith4015-06-07.mon



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources
Alan W. Klimek, P.E. Director
Division of Water Quality

February 3, 2006

Commanding General
Attn: I&E/EMD/EQB
Mr. Andrew Smith
Building 12
PSC Box 20004
MCB Camp Lejeune, North Carolina 28542-0004

Subject: Review of Annual Groundwater Monitoring Report 2003-2005
Camp Lejeune-Building LCH-4015
Onslow County
Incident No. 85352

Dear Mr. Smith:

The Division of Water Quality (DWQ), Aquifer Protection Section is in receipt of the subject report, dated January 17, 2006. This report was submitted by Engineering and Environment, Inc. on behalf of the Department of the Navy, Atlantic Division, Naval Facilities Engineering Command and received in this office on January 30, 2006. Thank you for this report.

The Aquifer Protection Section has reviewed the report. Dissolved contaminant concentrations above 2L standards remain at the site in the shallow and intermediate aquifer zones. The consultant recommended that the biosparge/soil vapor extraction system continue to be operated at the site and the site continue to be monitored semi-annually with annual reporting of results until 2L standards have been achieved for four consecutive monitoring events. DWQ agrees with these recommendations. Additionally, it appears as if the intermediate zone dissolved plume is not renewed. DWQ is not recommending additional assessment at this time due to the low contaminant concentrations in the intermediate zone. If contaminant concentrations increase in the intermediate aquifer zone, future assessment may be necessary.

DWQ would like to offer the following suggestions for future monitoring reports:

- The Summary of Laboratory Analyses table would be more useful if all historical and recent laboratory results for each, individual well were contiguous. This would allow for easy comparison of concentrations versus time in each well. Graphs depicting this information would also be useful.
- It should be noted that there is an April 2005 version of the 15A NCAC 2L rules that includes updated standards for a number of compounds (i.e., the standard for ethylbenzene is now 0.550 mg/L). This document is available on the DWQ website.

Please continue operation of the system and monitoring at the site. Should you have questions, please contact Ginny Henderson at (910) 796-7215.

Yours very truly,

Charles F. Stehman, Ph.D., P.G.
Environmental Supervisor II

CFS/GMH

cc: WIRO-APS
William C. Morris, P.G., Engineering and Environment, Inc.

\\GWS\GINNY\Incidents\Building LCH 4015 85352\Annual Monitoring Report 2003-2005.feb2006.doc

One
North Carolina
Naturally



UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC Box 20004
Camp Lejeune, North Carolina 28542-0004

IN REPLY REFER TO:

62875090/15

BEMD

JAN 26 2005

Dr. Charlie Stehman
North Carolina Department of Environment
and Natural Resources
Division of Water Quality
Aquifer Protection Section
127 Cardinal Drive
Wilmington, North Carolina 28405-3845

Dear Dr. Stehman:

As a result of North Carolina Department of Environment and Natural Resource's comments on the Remedial Action Optimization (RAO) Report for the remediation site associated with Building LCH4034 and former Building LCH4015, Marine Corps Base, Camp Lejeune conducted an additional assessment. The enclosed report focuses on further defining free-phase product and soil contamination in the areas of the (former) LCH4034 UST and LCH4015 AST systems.

The RAO report initially proposed the possibility of commingled contaminant plumes from the UST and AST systems. This assessment, however, determined commingling is not the case. We did not identify free product in the assessed areas. Soil contamination, however, was found in both former UST and AST areas. Soil contaminant levels in the former UST area were below established Residential MSCCs (Figures 2A-2C). Total petroleum hydrocarbon concentrations, however, were detected above State Action Levels (Figure 2D). In-situ soil treatment (via soil vapor extraction) is currently ongoing in the area of the AST system-related soil contamination (Figure 2E); therefore, no additional treatment is proposed at this time.

Your letter of June 14, 2004 also requested groundwater delineation in the area of the former UST. Groundwater assessment is not yet complete, as we wanted to use the information obtained through this assessment for well placement. Based on the fact that free product was not identified, we feel one well in the tank basin is sufficient to better delineate groundwater contamination. The follow-up groundwater study will be funded by April.



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources
Alan W. Klimek, P.E. Director
Division of Water Quality

March 29, 2005

Ms. Nickki Hall
United States Marine Corps
PSC Box 20004
Camp Lejeune, North Carolina 28542-0004

Subject: Review of Report of Findings For
Soil and Free Phase Product Assessments
Building LCH-4015 and Building LCH-4034
Marine Corps Base Camp Lejeune
Onslow County

Dear Ms. Hall:

On February 2, 2005, the Division of Water Quality, Aquifer Protection Section received the subject report. This report was submitted by Catlin Engineers and Scientists on behalf of the Marine Corps Base Camp Lejeune. Thank you for this report.

Piezometers were installed along the former product delivery lines and gauged over a 26-day period. According to the report, no measurable thickness of free-product was identified in the piezometers. Your consultant concludes that absence of free-product along the former product delivery line and around the existing dispensers indicates that contamination originating from the two sources, LCH-4034 USTs and the LCH-4015 ASTs, is not co-mingled. The Aquifer Protection Section accepts that the source of the free product may not be associated with the LCH-4034 USTs, however, the information provided in the report is not sufficient to confidently identify the reported free product.

It should also be noted that the piezometers that were installed were NOT in compliance with 15A NCAC 2C, well construction standards. Temporary wells which are constructed to determine aquifer characteristics, are to be properly abandoned or converted to a permanent well within five (5) days of the completion of drilling the borehole. In addition, in accordance with 15A NCAC 2C .0108 (f), "Temporary wells and all other non-water supply wells shall be constructed in such a manner as to preclude the vertical migration of contaminants within and along the borehole channel."

The Aquifer Protection Section agrees with the consultant's recommendation for the continuation of the active remediation activities and groundwater monitoring program recommended in the RAO and RCAP. Catlin also recommends that the Annual Groundwater Monitoring Report evaluate the possibility of shutting down a portion of the biosparge and soil vapor extraction systems. The Aquifer Protection Section does not object to this proposal.

Please proceed with the requested work. Should you have questions, please contact Diane Adams at (910) 395-3900.

Yours very truly,

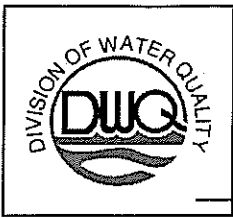
Charles F. Stehman, Ph.D., P.G.
Environmental Supervisor I

CFS/CDA

cc: WiRO-APS
Bruce Reed, UST Section

s:\gws\diane\usmc2005LCH4015findings.mar

One North Carolina
Naturally



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director
Division of Water Quality

June 14, 2004

Ms. Nickki Hall
United States Marine Corps
Marine Corps Base
PSC Box 20004
Camp Lejeune, North Carolina 28542-0004

Subject: Review of Remedial Action Optimization
And Revised Corrective Action Plan
Building LCH 4015
Marine Corps Base Camp Lejeune
Onslow County

Dear Ms. Hall,

The Division of Water Quality, Groundwater Section is in receipt of the subject report, submitted on behalf of the Marine Corps by Catlin Engineers and Scientists, and received in this office May 18, 2004. The Groundwater Section has reviewed the report and is in agreement with following UST Section comments:

1. Water supply well LCH-4006 is no longer in service. The report recommends abandonment of this well. A copy of the abandonment record should be submitted to the UST and Groundwater Section upon completion of the abandonment.
2. The source of the product should be identified and defined.
3. The UST Section recommends soil sampling between MW-2 and the former UST line.
4. The proposed soil samples in the report should not be taken in the clean backfill of the UST trench.

In addition, the Groundwater Section requests that delineation of groundwater be completed in the former UST location. Please proceed with the additional requested work. Should you have questions, please contact Diane Adams at (910) 395-3900.

Yours very truly,

Charles F. Stehman, Ph.D., P.G.
Environmental Supervisor I

CFS\CDA

cc: WIRO-GWS
Bruce Reed, UST Section

s:\gws\diane\usmc2004LCH4015.jun



JUN 18 2004

FROM: I&E: YES/NO

Due Date to I&E: _____

INSTALLATIONS AND ENVIRONMENT DEPARTMENT
Environmental Management Division
Correspondence Tracking Sheet

Tickler # _____

Due Date: _____

Date Received: 6-18-04

Lead Office
for joint response: _____

Assigned to: ECB

Copy to: (ECB) (EQB) (ECON)

Subject: NC DWQ - 144004 - RVW of remedial Action optimization
+ Revised Corrective Action Plan LCH 4015

ACTION: (ECB) (EQB) (ECON) Emily/Brian - please take
for action - 6/18/04

Additional comments/remarks: Nikki -
Please take for BREM
action. Since
is TAD this week, I am
forwarding directly to
you. I have placed a
copy of the letter in Brian's
box for his FYI.
V/R,
E

SCOTT A. BREWER, PE
DIRECTOR

FAX TRANSMITTAL

of pages ▶

To <i>Lori Reuther</i>	From <i>Nikki Hall</i>
Agency <i>LANTDIV</i>	Phone # <i>910.451.9610</i>
Fax # <i>882624804</i>	Fax # <i>.5997</i>
NSN 7540-01-317-7368	5099-101 GENERAL SERVICES ADMINISTRATION



Nikki
Reuther
6/21

James B. Hunt, Jr., Governor
Bill Holman, Secretary

June 20, 2000

Ms. Nikki Hall
United States Marine Corps
PSC Box 20004
Camp Lejeune, NC 28542-0004

Subject: USMC-Camp Lejeune
Bldg. LCH- 4015
Comprehensive Site Assessment
Onslow County

Dear Ms. Hall:

On July 2, 1996, the Department of Environment and Natural Resources, Wilmington Regional Office received a Comprehensive Site Assessment Report dealing with petroleum contamination in soils and groundwater in the vicinity of Building LCH - 4015. Regrettably this report has only recently reached the Groundwater Section of the Division of Water Quality.

The Groundwater Section is responsible for regulation of all petroleum spills which are not the result of underground storage tank releases. As it would appear that most if not all of the contamination at this site comes from above ground storage and associated delivery piping, the Groundwater Section will be responsible for commenting on work at this site. Apparently the Underground Storage Tank Section of the Division of Waster Management has reviewed and commented on the report, however all further correspondence concerning this site should be sent to the Groundwater Section.

Although the report appears to fulfill many of the requirements for a Comprehensive Site Assessment the following general comments are provided for your consideration:

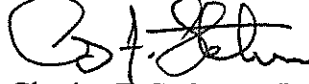
- For assessment of groundwater monitoring wells were been installed to assess groundwater in the top 10-12 feet of saturation and at 50 feet below the land's surface. There is a zone between these two depths which is not assessed. It is very possible that the medium sands found between 23 and 35 feet below land's surface, as described in the monitoring well logs for MW-19 and MW-20, are favorably transmissive and act as a conduit for contamination movement. The three dimensional configuration of groundwater contamination should be further assessed.

Nikki Hall
Page Two
June 20, 2000

- The extreme vertical gradient which has been observed at this site is unusual. The report was generated in 1996. Has this anomaly disappeared or is it still present at the site?
- I understand, also, that remediation has been implemented at this site. Could you please forward plans for this corrective action and any reports of the progress which has been made in remediation.

Please let me know if you think there are other non-UST fuel spill incident reports, for which you are responsible, which may have been sent to this office and are still in need of review. If you have any questions concerning this notice, please contact me at (910) 395-3900.

Yours very truly,



Charles F. Stehman, Ph.D., P.G.
Environmental Regional Supervisor I

cc: Neal Paul
WiRO-UST
WiRO-GWS

s:/ust/charlie/hall4015.jun

Faxed 22 Jun 00
to L

Nikki

Hope this is on your list.

N/C
19

State of North Carolina
Department of Environment
and Natural Resources
Wilmington Regional Office
Division of Waste Management
UST Section



James B. Hunt, Jr., Governor
Bill Holman, Secretary

June 14, 2000

Ms. Nikki Hall
United States Marine Corps
PSC Box 20004
Camp Lejeune, NC 28542-0004

Subject: Review of Report Entitled
"Comprehensive Site Assessment"
USMC-Camp Lejeune, Bldg. LCH-
4015
Incident No. Pending, Risk: 110/I
Camp Lejeune, Onslow County

Dear Ms. Hall:


On September 29, 1999, the Division completed a review of the subject report that was received on July 2, 1996. Comments concerning the Division's review of the report are as follows:

- All possible source areas were not thoroughly investigated.
- Due to the above and the hydrogeologic conditions reported at this site, further assessment is required. The report will remain incomplete until thorough assessment is conducted and reported to the Division. This assessment should include additional soil and groundwater sampling. The contaminant plumes at this site are probably diving, and a conscientious effort must be focused on defining the extent of these plumes.

(DNAPL?)

If you have any questions concerning this notice, please contact me at (910) 395-3900.

Sincerely,


Bruce Reed
Hydrogeologist II

BR

cc: WiRO-UST
WiRO-GWS

s:\ust\bruce\hall4015.jun