

## MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542

MAIN/JIW/th 4100 5 June 1978

Mr. J. Gordon Layton North Carolina Department of Human Resources Division of Health Services Solid Waste Branch Post Office Box 2091 Raleigh, North Carolina 27602

Dear Mr. Layton:

As per our discussion during the 25 May 1978 meeting at Camp Lejeune relative to the Base Sanitary Landfill Operation Plan, the enclosed soils data, facilities maps, contour maps and cross sectional drawings are submitted for your review and continued action.

It is understood this information will be used to evaluate/approve the existing site and proposed expansion area.

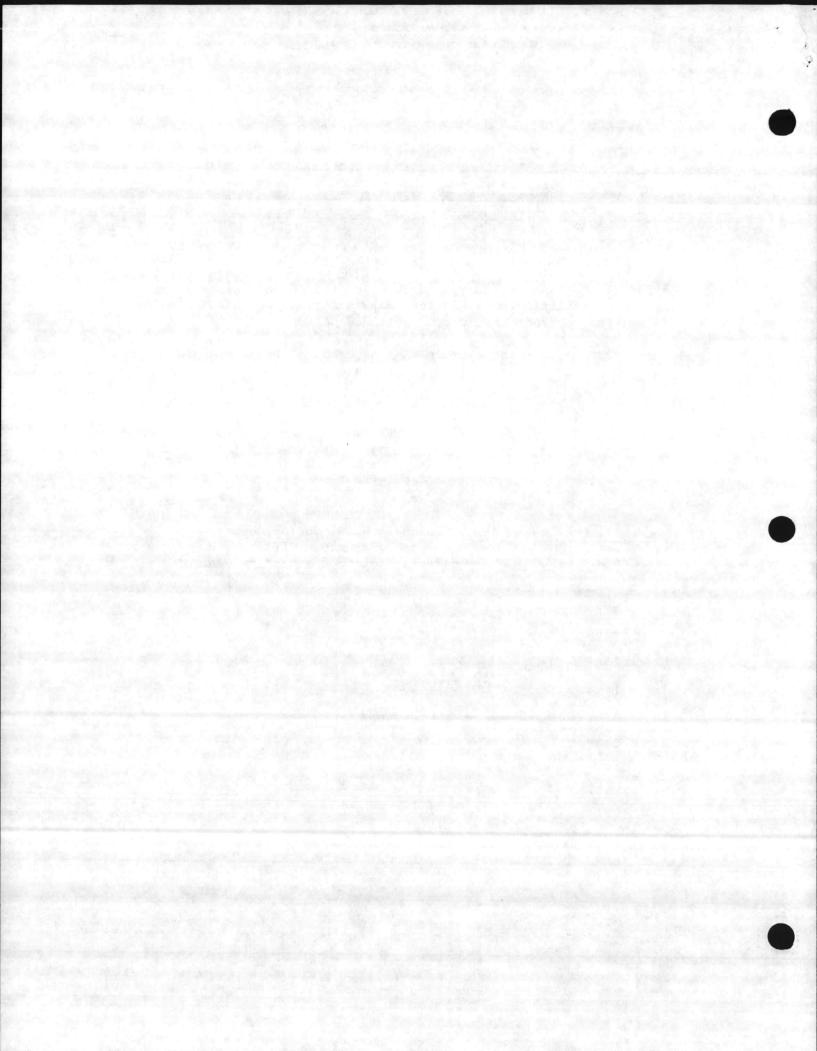
For further information contact Mr. Wendell Neal or Mr. Julian Wooten, Base Maintenance Department, phone (919) 451-5003/2083.

Sincerely,

C. D. WOOD

Colonel, U. S. Marine Corps
Base Maintenance Officer
By direction of the Commanding General

Enclosures



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June 19, 1978

Colonal C. D. Wood Base Maintenance Officer U. S. Marine Corps Harine Corps Base Camp Lejeume, North Carolina 28542

Dear Colonel Wood:

RE: Camp Lejeune Base Landfill Site Plans

Enclosed is a copy of the landfill site plan which is approved with the following conditions:

- 1. A 3-foot separation between waste and the ground water table shall be maintained.
- 2. Immdated areas shall be filled with soil or inert material before use.

These conditions should be used in developing the operational plans.

In regard to our meeting of May 25, 1978, in reference to a drainage system for the site, a meeting should be scheduled with Mr. Fred J. Wood and me before the final design of the operational plans is completed.

Also, please find enclosed a copy of the Division of Health Services "Solid Waste Management Rules".

If I can assist you in any way, please call me.

Sincerely,

J. Gordon Layton Environmental Engineer Solid Waste & Vector Control Branch Sanitary Engineering Section

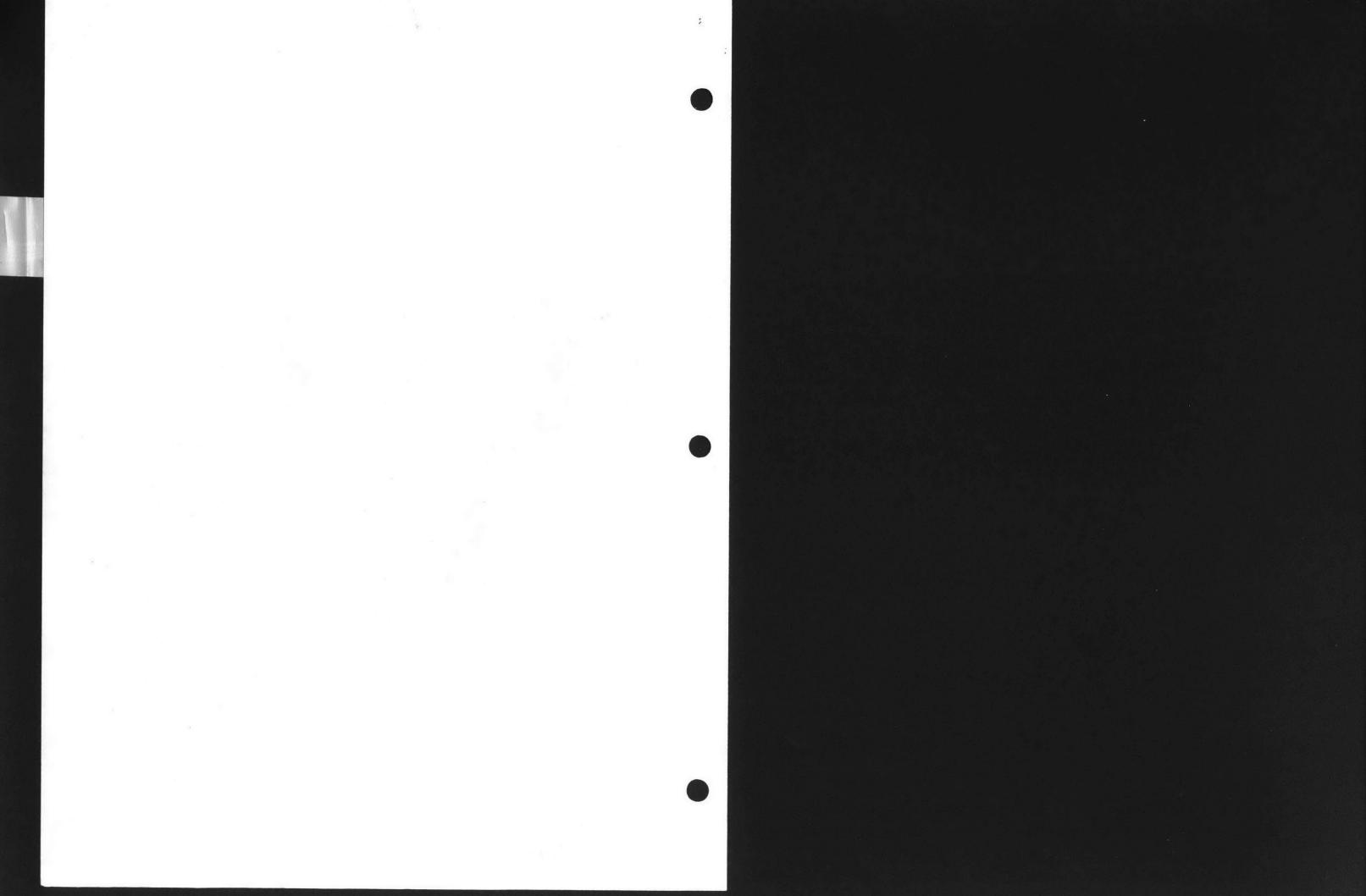
JOL/wss

ed: Mr. Wendall Neal

Mr. Julian Wooten

Mr. Fred J. Wood

Mr. O. W. Strickland



June 19, 1978

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Base Maintenance Officer
U. S. Marine Corps
Hidrine Corps Base
Camp Lejeuns, North Carolina 28542

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Environmental Engineer
Solid Waste & Vector Control Branch
Sanitary Engineering Section

JOL/wss

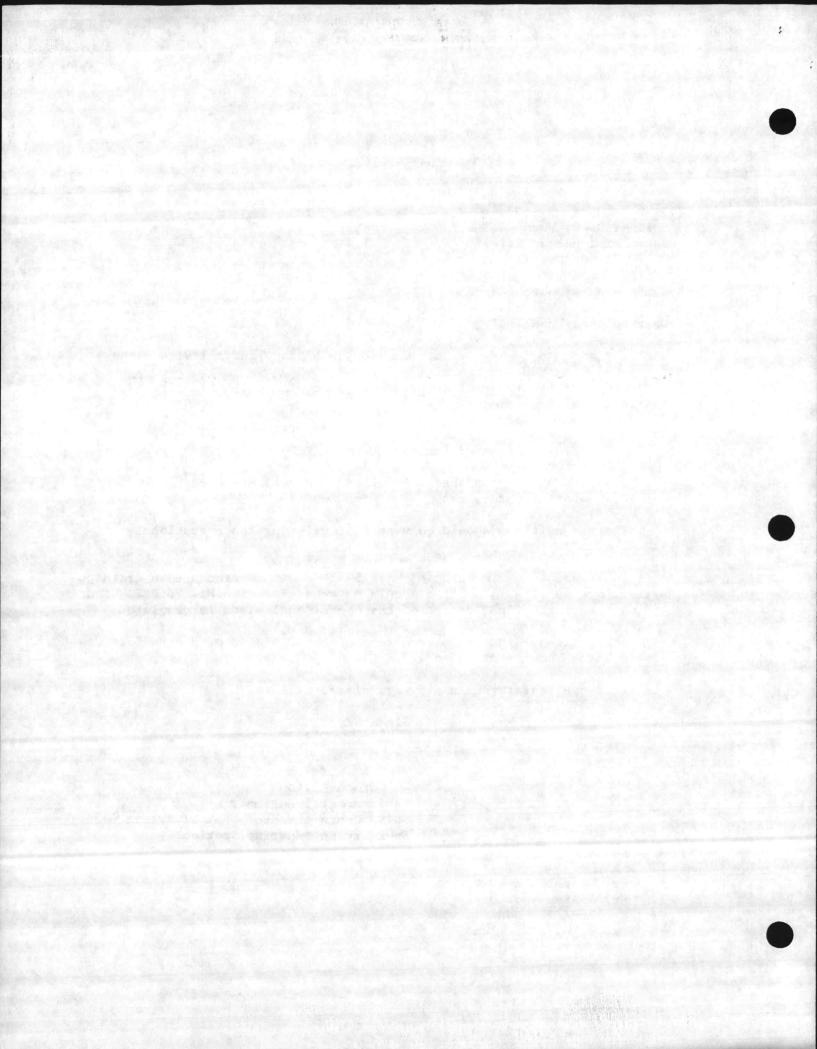
ed: Mr. Wendall Neal

All districts

Mr. Julian Wooten

Mr. Fred J. Wood

Mr. O. W. Strickland







PWO:04:ELR:hf PWD 81-21 2 LAFE 1982

Mr. Gordon Layton
N. C. Department of Human Resources
Solid and Hazardous Waste Management Branch
P. O. Box 2091
Raleigh, NC 27602

Re: Camp Lejeune Sanitary Landfill Operational Plan

Dear Mr. Layton:

The enclosed four copies of the Operational Plan for the Marine Corps Base, Camp Lejeune, Sanitary Landfill are submitted for your approval.

Please address questions, comments and correspondence to:

Mr. Eris L. Rouse Director, Design Division Public Works Dept, Marine Corps Base Camp Lejeune, NC 28542 Telephone: 919-451-2213

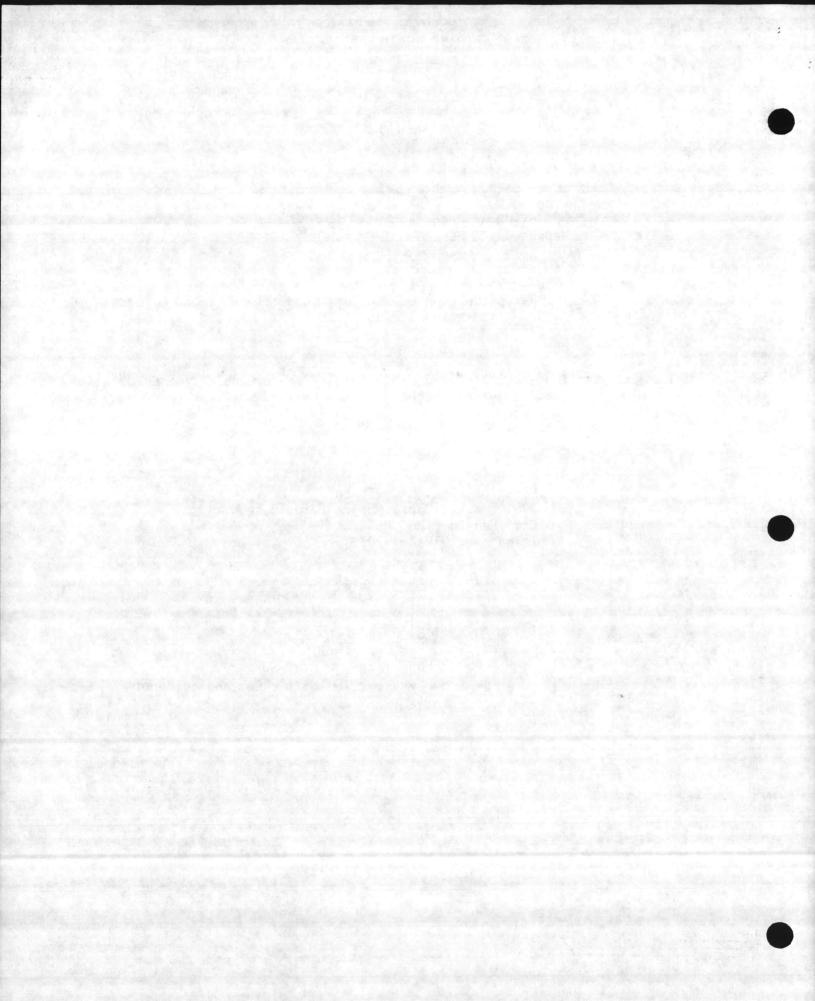
Sincerely,

R! E. CARLSON

CDR, CEC, USN
Rublic Works Officer

By direction of the Commanding General

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PERMIT NO. 67-03

DATE ISSUED 7/20/82

#### SOLID WASTE PERMIT

#### Conditions of Permit:

- 1. This permit may be subject to review at an administrative hearing upon petition of anyone whose legal rights, privileges and duties may have been affected by the issuance thereof.
- 2. This permit shall not be effective unless the certified copy is filed in the register of deeds' office, in the grantor index under the name of the owner of the land in the county or counties in which the land is located.
- 3. The "Certification of Recordation of Solid Waste Permit" returned to the Solid & Hazardous Waste Management Branch prior to receiving solid waste at the site.
- 4. This solid waste disposal site is permitted to receive solid waste as defined in 10 NCAC 10G, .0101(31), except that hazardous waste, liquid waste and any other wastes that may pose a threat to the environment or the public health are prohibited from disposal at this site unless prior authorization is obtained from the Division of Health Services.
- 5. This permit is for construction according to plans by McDowell-Jones, P.A., dated March, 1982. Any modification or deviation from the approved plans shall be approved by the N.C. Solid & Hazardous Waste Management Branch.
- 6. The fly ash area is operated so as to provide cover on the horizontal surface daily. The working slope of the area will not require daily cover if the fly ash does not become airborne. The fly ash should be graded and compacted daily, when disposed. Top cover for the fly ash may be other demolition material.
- 7. The grease holding pond is not part of this permit.
- Ground-water monitoring wells are installed as shown in red on pages 1 and 2 of the plans per the enclosed specification.
   Water quality monitoring will be the responsibility of Camp Lejeune Marine Corps Base. Parameters and sampling procedures will be outlined and forwarded. Results of water quality tests shall be forwarded to this office annually.

DHS Form 2871 (Rev. 11/80) Solid & Hazardous Waste Management Branch 





DATE ISSUED 7/20/82

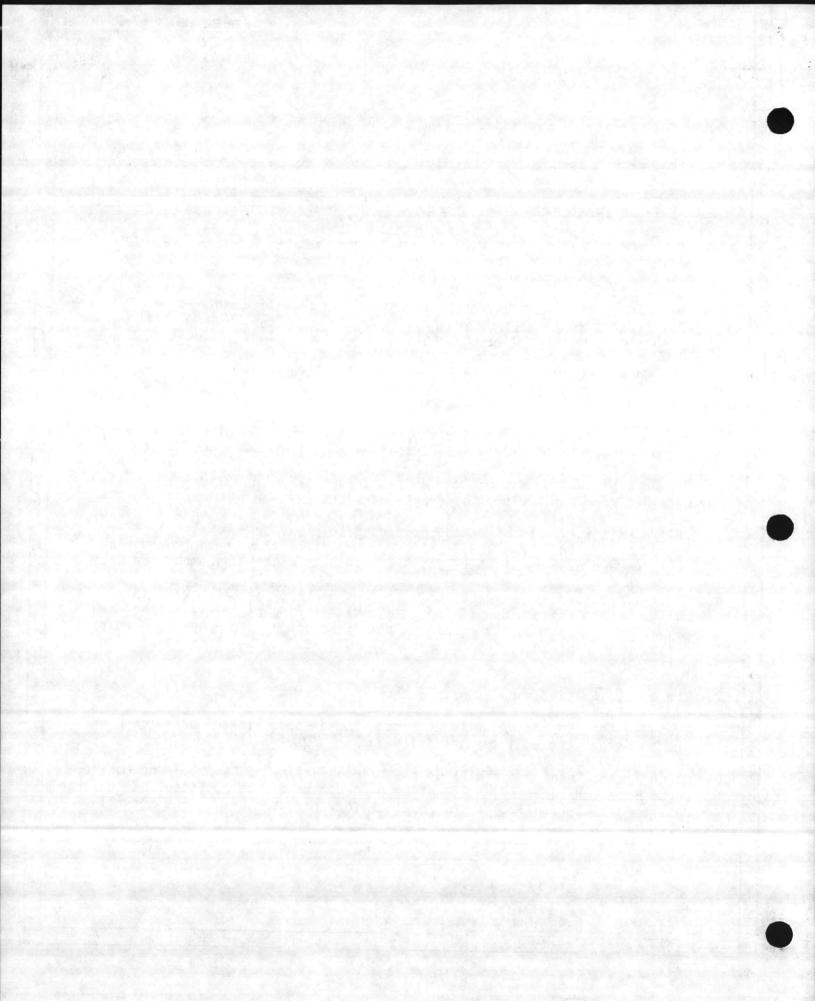
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DHS Form 2871 (Rev. 11/80)

Solid & Hazardous Waste Management Branch



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July 20, 1982

Commanding General United States Marine Corps Marine Corps Base Camp Lejeune, NC 28542 Attn: Asst. Chief of Staff-Facilities

Re: Permit #67-03 Camp Lejeune, Onslow County

Dear Sir:

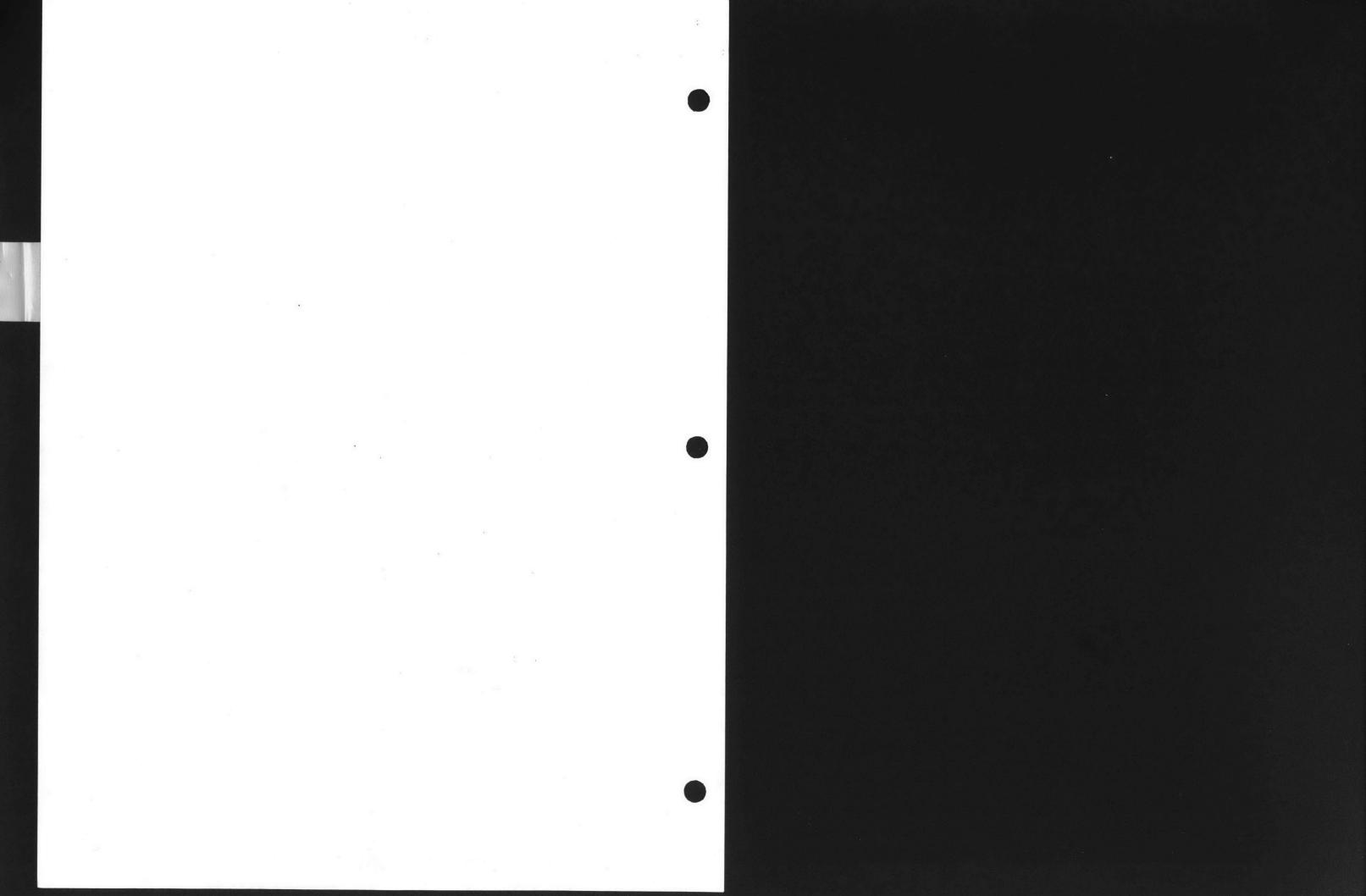
The enclosed plan is approved in accordance with G.S. 130-166. Permit No. 67-03 is issued under conditions provided for on the permit.

If you have any questions, please advise.

Respectfully,

J. Gordon Layton, Environmental Engineer Solid & Hazardous Waste Management Branch Environmental Health Section

JGL:AS . Enclosure cc: R. E. Carlson Raymond L. Church Pat McDowell Eris L. Rouse



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July 20, 1982

Commanding General
United States Marine Corps
Marine Corps Base
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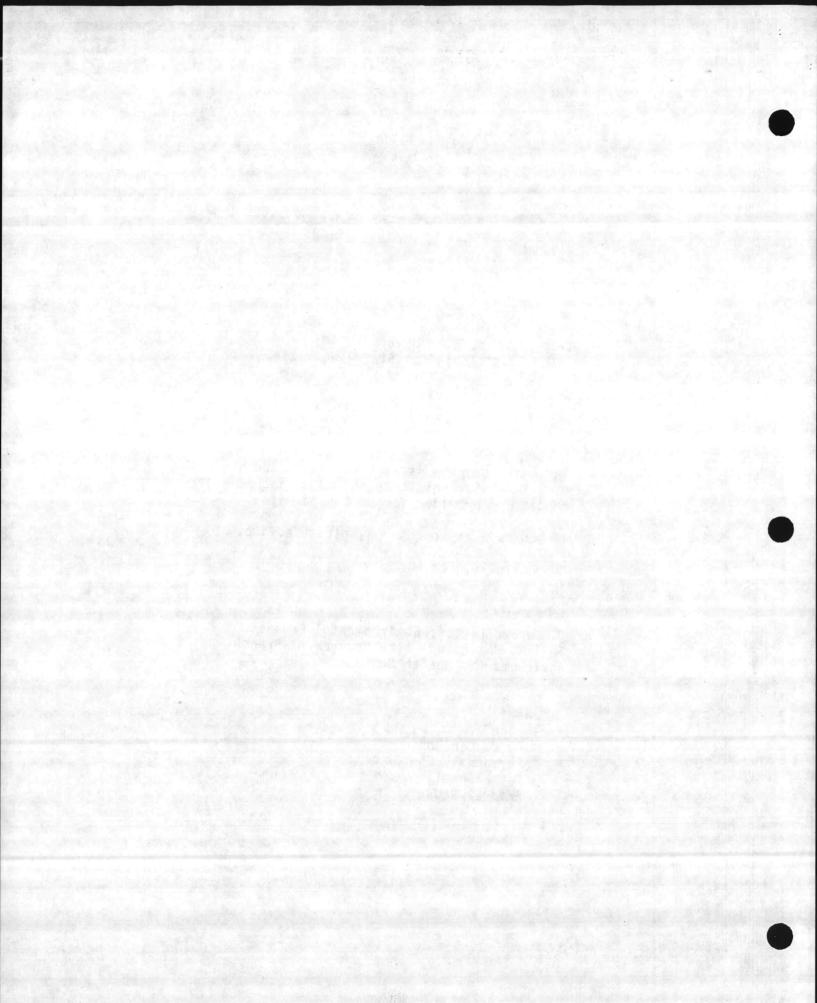
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JGL:ns
Enclosure
cc: R. E. Carlson
Raymond L. Church
Pat McDowell
Eris L. Rouse



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STATE HEALTH DIRECT

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

CERTIFIED COPY OF SOLID WASTE PERMIT

I do hereby certify that the attached PERMIT is an exact and true copy of Permit No. <u>67-63</u>.

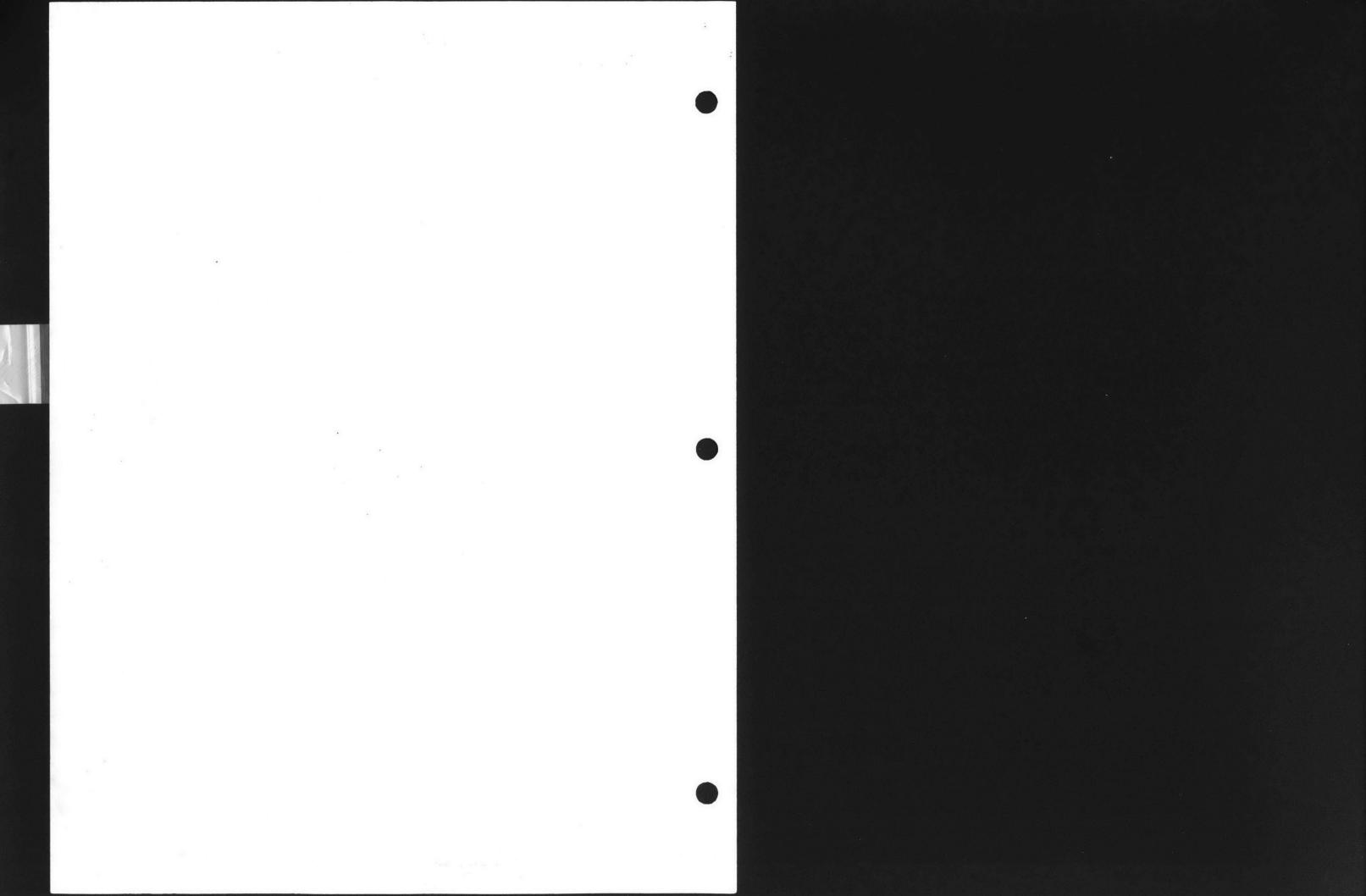
Solid & Hazardous Waste Management Branch Environmental Health Section

Register of Deeds

North Carolina	
Wake county	
1, fell a Seller	a Notary Public for said
County and State, do hereby certif	y that O.W. Streetland
execution of the foregoing instrum	ent.
Witness my hand and official	seal, this the $\frac{26^{12}}{26^{12}}$ day of
July,	19 82.
Sefficial seal)	Sell J Sellers Notary Public
My commission expires	2× , 1982.
NORTH CAROLINA, Onslow County The foregoing certificate(s) of Nell T. S	ellers,
and	
Notary (ies) Public is (are) certified to be correct. This insecorded in this office in Book 630 Page 866	
1982 A. D., at 9:13 A of clock A. M.	
Milded M. Affinal By Register of Deeds, Unslow County	Peninter of Deeds









The foregoing certificate(s) of

DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

#### CERTIFIED COPY OF SOLID WASTE PERMIT

I do hereby certify that the attached PERMIT is an exact and true copy of Permit No. (27-63).

W. Strickland, Head

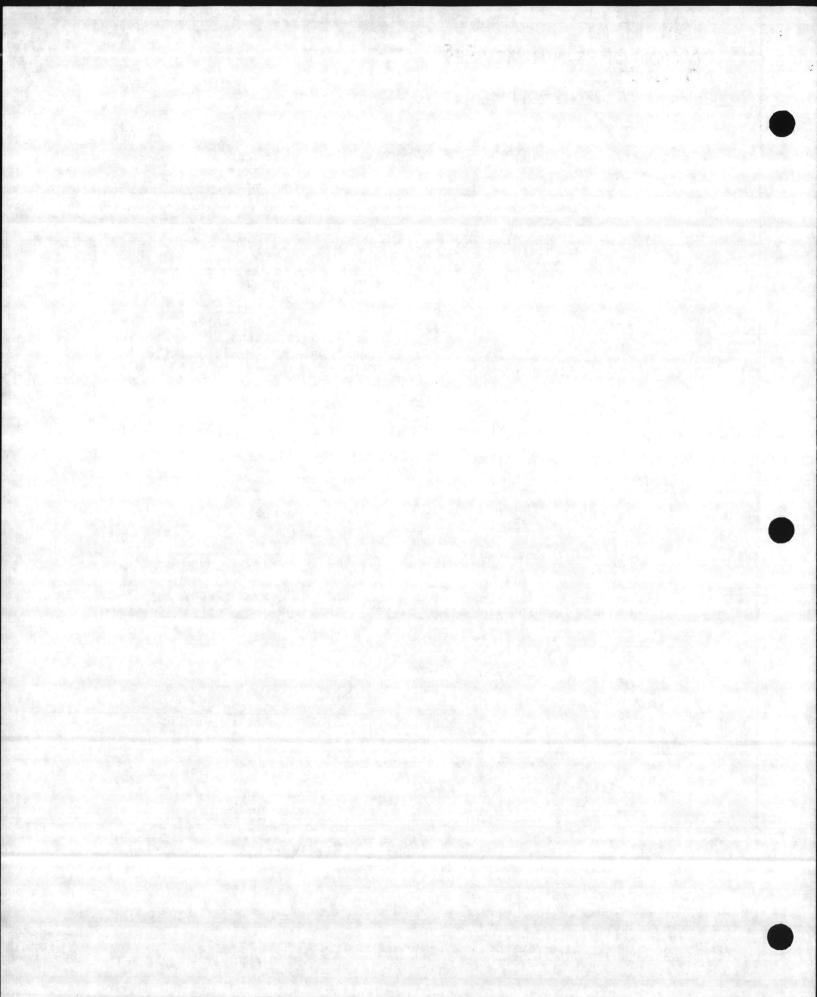
Environmental Health Section

Register of Deeds

Solid & Hazardous Waste Management Branch

Nell T. Sellers

Notary (les) Public is (are) certified to be correct. This instrument was presented for registration and recorded in this office in Book 630 Page 866 . This 26 day of August



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DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

CERTIFICATION OF RECORDATION OF SOLID WASTE PERMIT

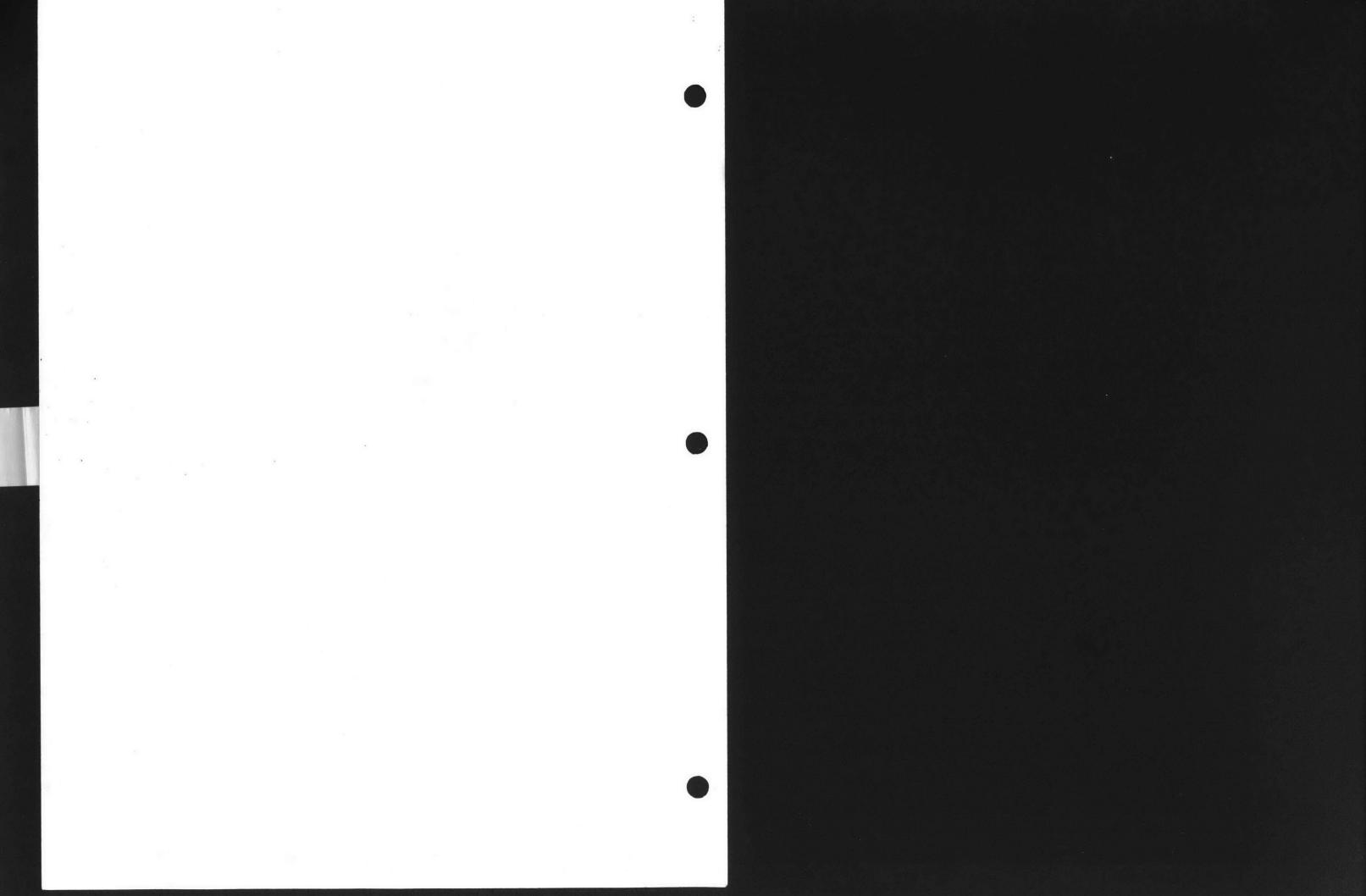
The Certified Copy of Permit # 67-03 was recorded on Page 630 , Book 866 ; on this 26 day of August , 1982. 9:13 A.M.

(seal)

To Landfill Owner/Operator:

In order for this permit to be valid it must be recorded as specified in the Permit. This certification of recordation must be received by the Solid & Hazardous Waste Management Branch, Division of Health Services, P.O. Box 2091, Raleigh, NC 27602, prior to receiving solid waste at the disposal site.





DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

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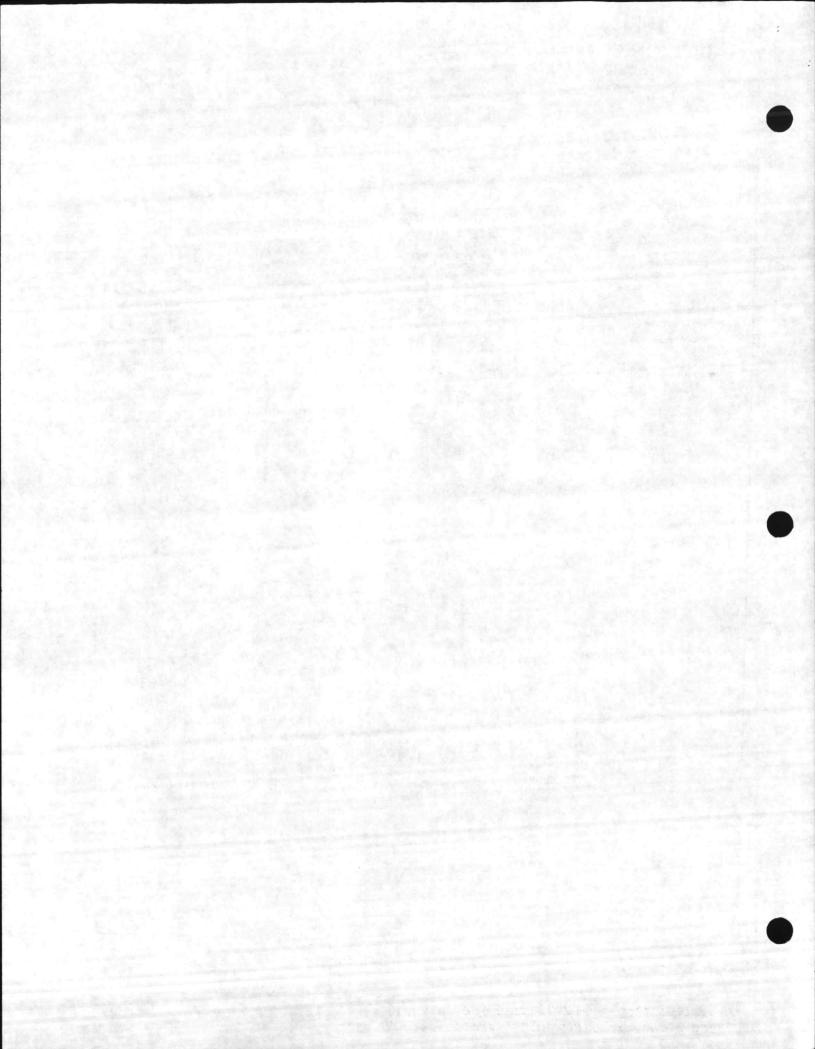
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DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

Ronald H. Levine, M.B., M.P.H.
STATE HEALTH DIRECTOR

December 10, 1982

Commanding General
United States Marine Corps
Marine Corps Base
Camp Lejeune, NC 28542
Attn: Asst. Chief of Staff-Facilities

Re: Groundwater monitoring at Camp Lejeune Landfill - Permit #67-03

Dear Sir:

As noted on the approved operational plan of July 20, 1982, four groundwater monitoring wells were to be installed around the site. Condition number 9 of the permit stated that Camp Lejeune would be responsible for sampling and analyses of the wells. I will outline the parameters to be analyzed and sampling procedures below:

The following parameters are to be sampled and analyzed at least annually:

Color Arsenic Lead Nitrate Fluoride Iran Barium Mercury Chloride Manganese Cadmium Selenium Sulfate Chromium Silver Copper

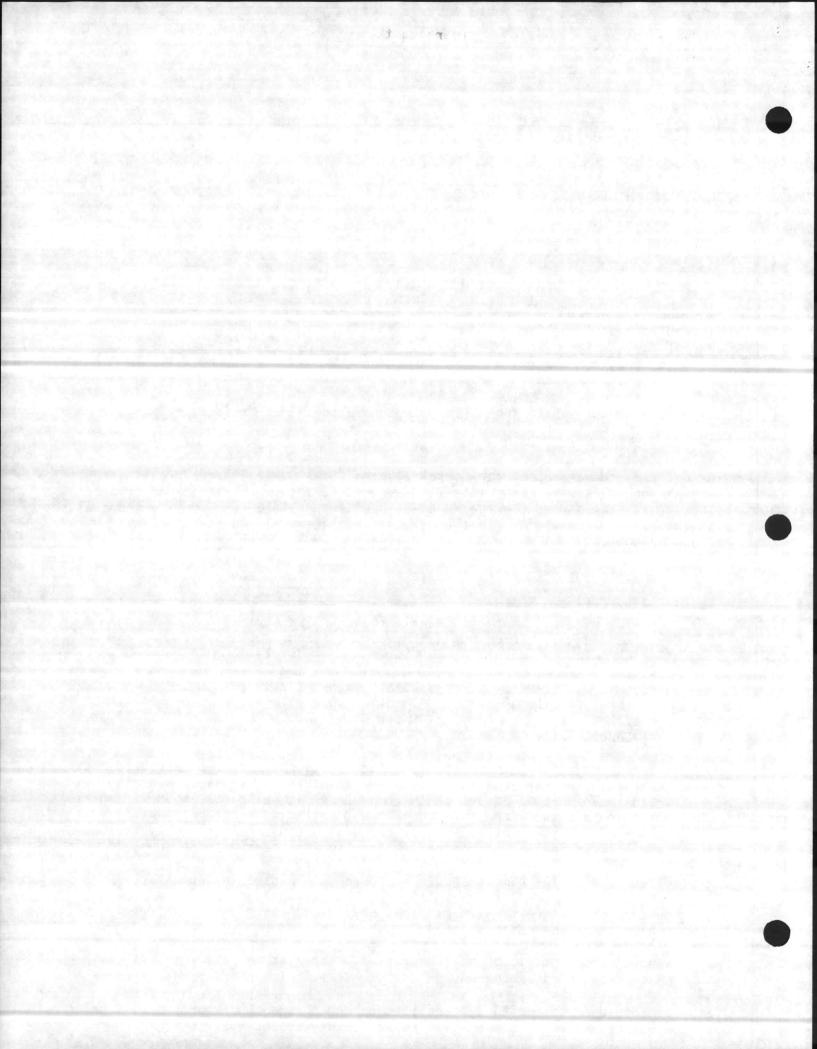
pH Total Organic Carbon
Total Dissolved Solids Total Organic Halogen
Zinc Water Elevation

Prior to collecting the samples, water elevations should be measured and recorded. The well should then be purged at least 2-3 volumes of the well casing. This is to assure fresh groundwater is being collected. Samples may then be drawn using a PVC bailer and collected in clean plastic containers. Water collected for the total organic halogen analysis should be collected in glass containers which have been properly cleaned.

Between wells the bailer should be thoroughly rinsed in tap water. An even better method of preventing cross-contamination is to use a separate bailer for each well which can then be cleaned back in the lab. This option is at your discretion.

Samples should be iced and transported to the lab for analysis. A chain of custody is not required, unless you feel it is needed for your records.

Samples should be collected and analyzed during the month of April each year and a copy of the results submitted to me as they become available.



If you have any questions concerning this matter, please contact me at (919) 733-2178.

Sincerely,

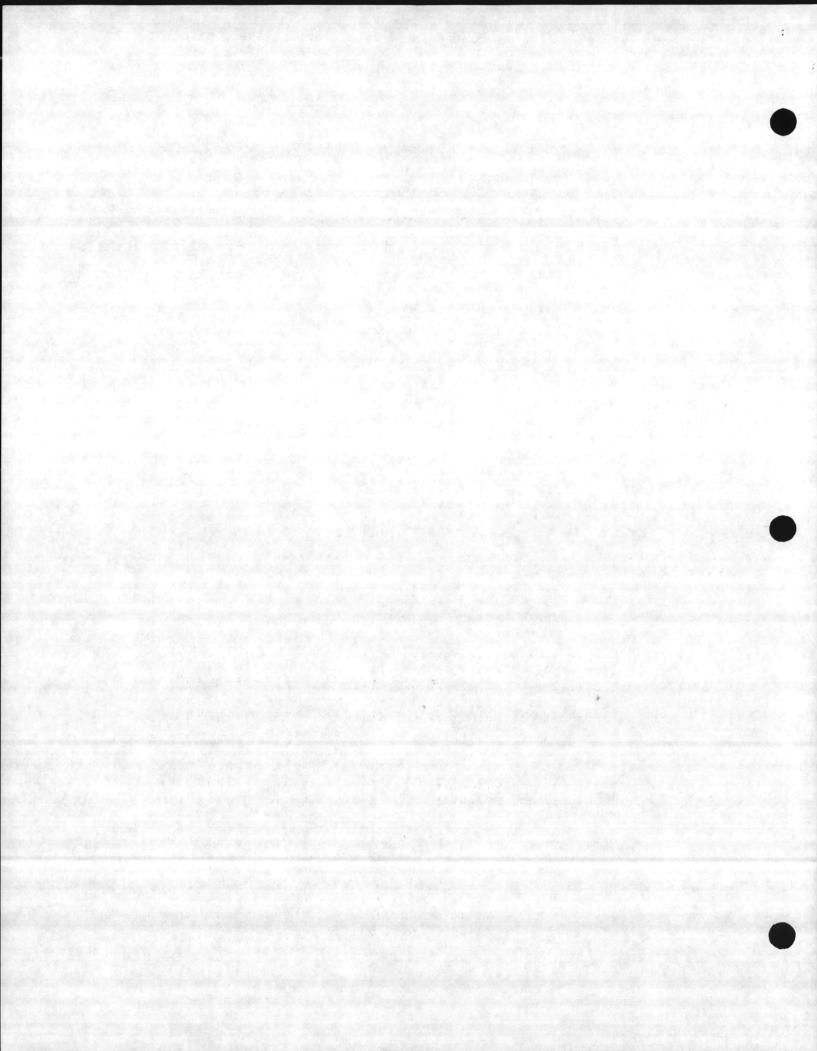
Gary D. Babb, Geologist Solid & Hazardous Waste Management Branch

Environmental Health Section

GDB:ns

cc: Danny Sharpe

Raymond L. Church





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# North Carolina Department of Human Resources Division of Health Services P.O. Box 2091 • Raleigh, North Carolina 27602-2091

James G. Martin, Governor Phillip J. Kirk, Jr., Secretary

Ronald H. Levine, M.D., M.P.H. State Health Director

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September 24, 1986

Commanding General Marine Corps Base Camp Lejeune, North Carolina 28542

Dear Ms. Betz:

The Solid and Hazardous Waste Management Branch is in the process of compiling water quality data for all of the solid waste facilities throughout North Carolina. For some unknown reason, this office does not have copies of the laboratory water quality analysis from the ground-water monitoring wells at the Camp Lejuene Landfill. Would it be possible for you to mail me copies of all availble ground water (and surface water) quality results from the landfill? As you may be aware, future sampling intervals are to be on an annual basis and subsequent analysis should include the following total parameters: arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, chloride, copper, floride, iron, zinc, manganese, and nitrate. Additionally, the following environmental indicators are to be tested for as well: total organic halogens (TOX), total dissolved solids (TDS), total organic content (TOC), Ph and conductivity. Copies of these results should be fowarded within 15 days of receipt (from your office) to the Solid Waste Hydrogeologist at the Solid and Hazardous Waste Management Branch P.O. Box 2091 Raleigh, North Carolina 27602-2091.

Your assistance is greatly appreciated and please contact this office at (919) 733-2178 if you have further comments or questions

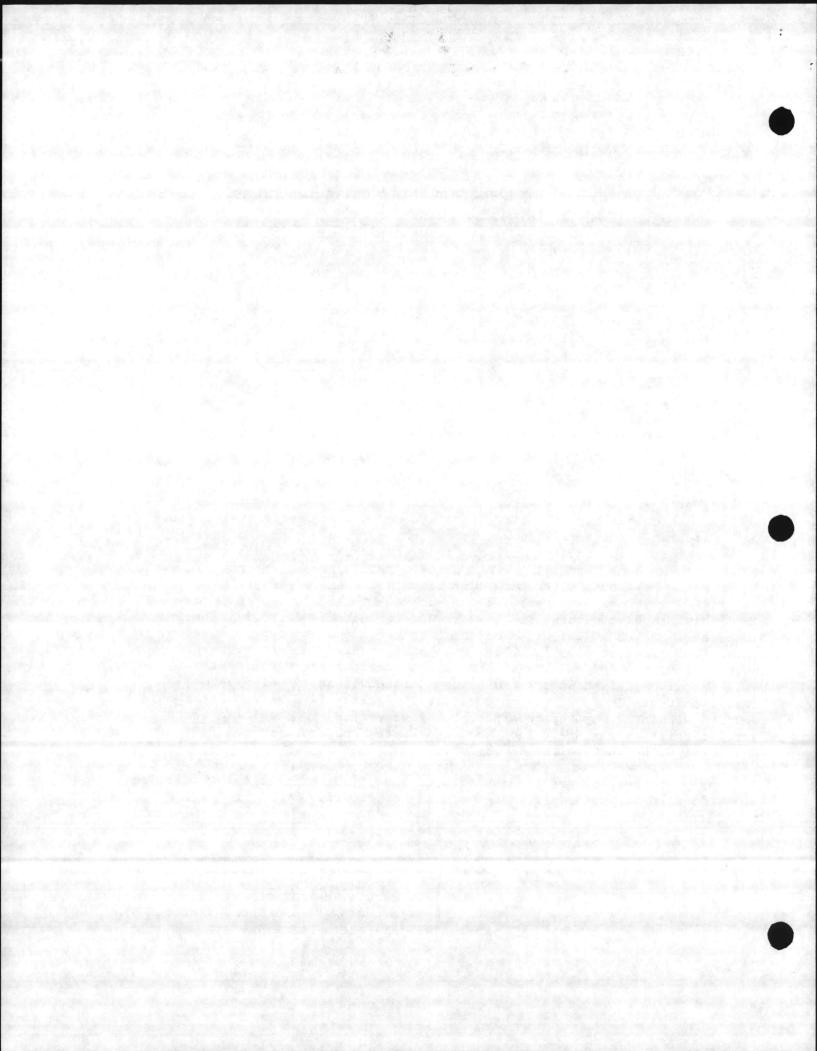
Yours Sincerely,

middle 2

Michael L. Babuin, Hydrogeologist

Solid & Hazardous Waste Management Branch

Environmental Health Section





# North Carolina Department of Human Resources Division of Health Services P.O. Box 2091 • Raleigh, North Carolina 27602-2091

James G. Martin, Governor Phillip J. Kirk, Jr., Secretary

Ronald H. Levine, M.D., M.P.H. State Health Director

February 9, 1987

Danny Sharp Camp Lejeune CC MLB Director, NR+Env. Aff. Camp Lejeune, NC 28542

NOTICE OF DEFICIENCY: Regarding ground-water monitoring wells at Camp LeJeune Landfill.

Dear Mr. Sharp:

A recent inspection at the above referenced facility indicates the following problems associated with the operation and subsequent maintenance of the existing ground-water monitoring wells.

- 1. Damaged PVC cap.
- 2. Rusted outer casing.

Because these problems significantly influence and affect the integrity and validity of the analytical results, it is of the utmost importance that these deficiencies be corrected as soon as possible. Your prompt attention to this matter is greatly appreciated.

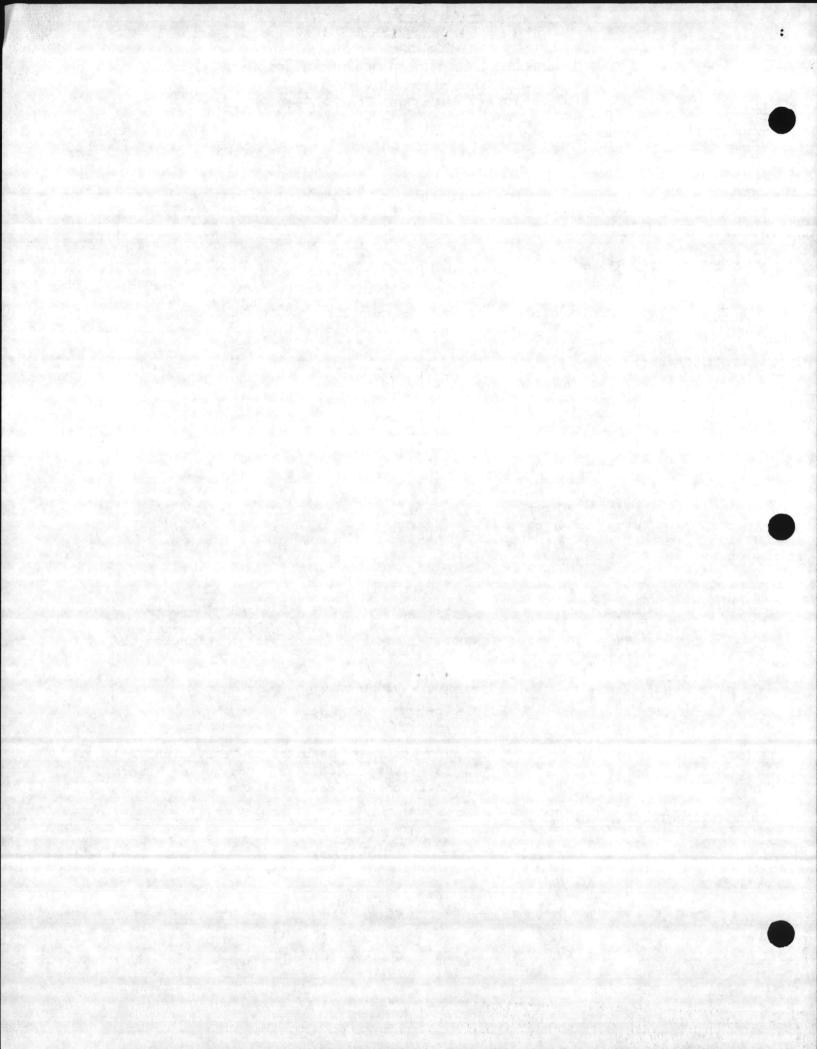
Yours sincerely,

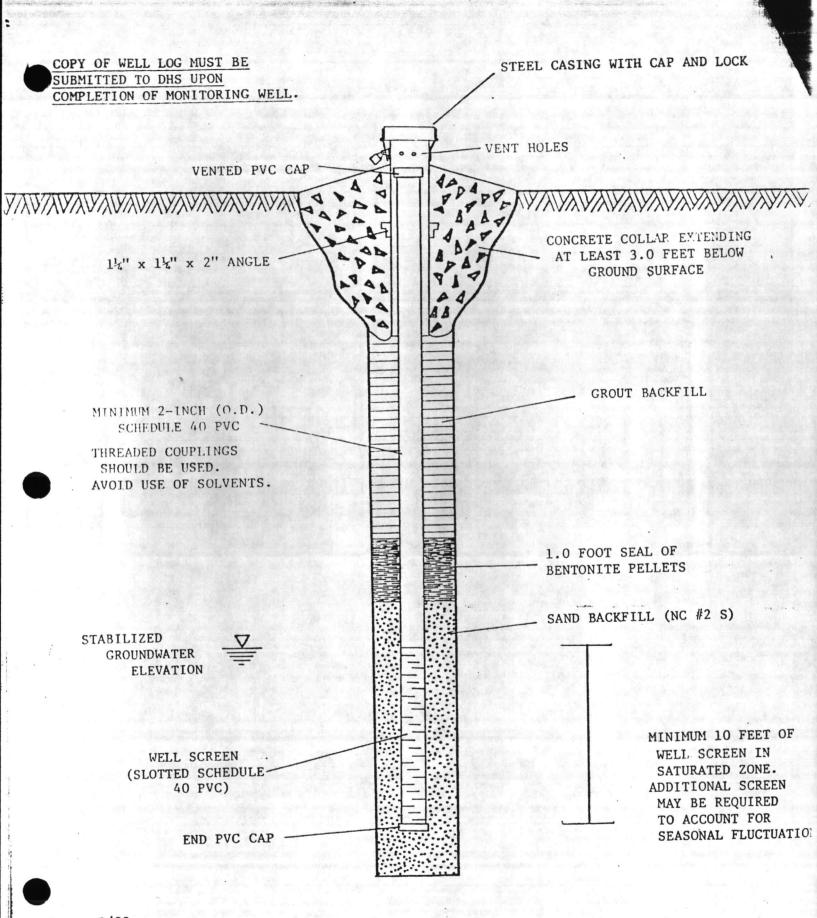
Thomas E. Vil

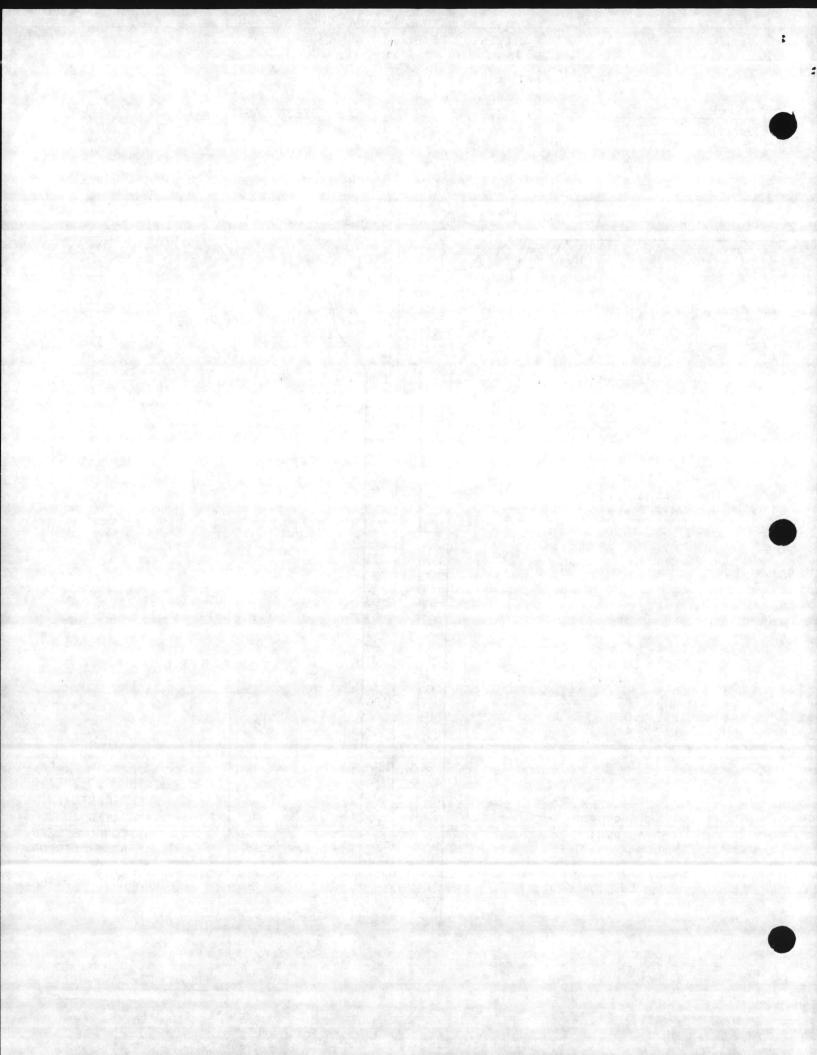
Tom Will, Hydrogeological Technician Solid & Hazardous Waste Management Branch Environmental Health Section

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cc: M.L. Babuin







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