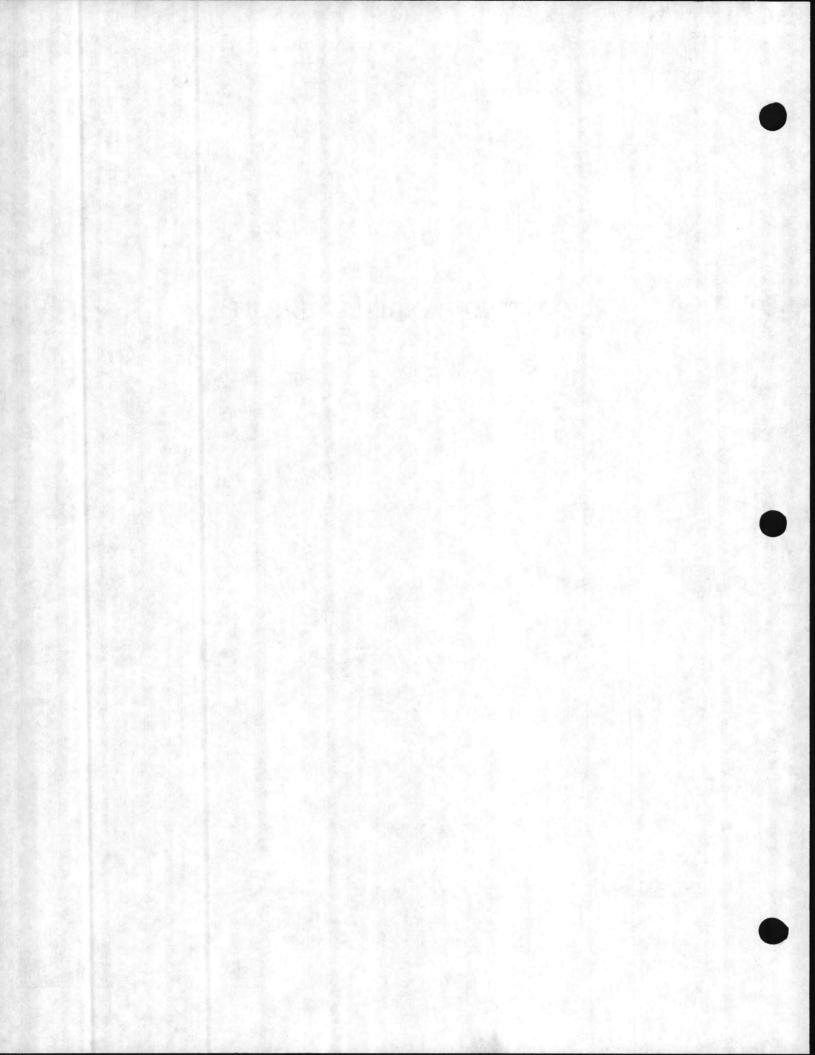
EXISTING LANDFILL PERMIT





UNITED STATES MARINE CORES 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.

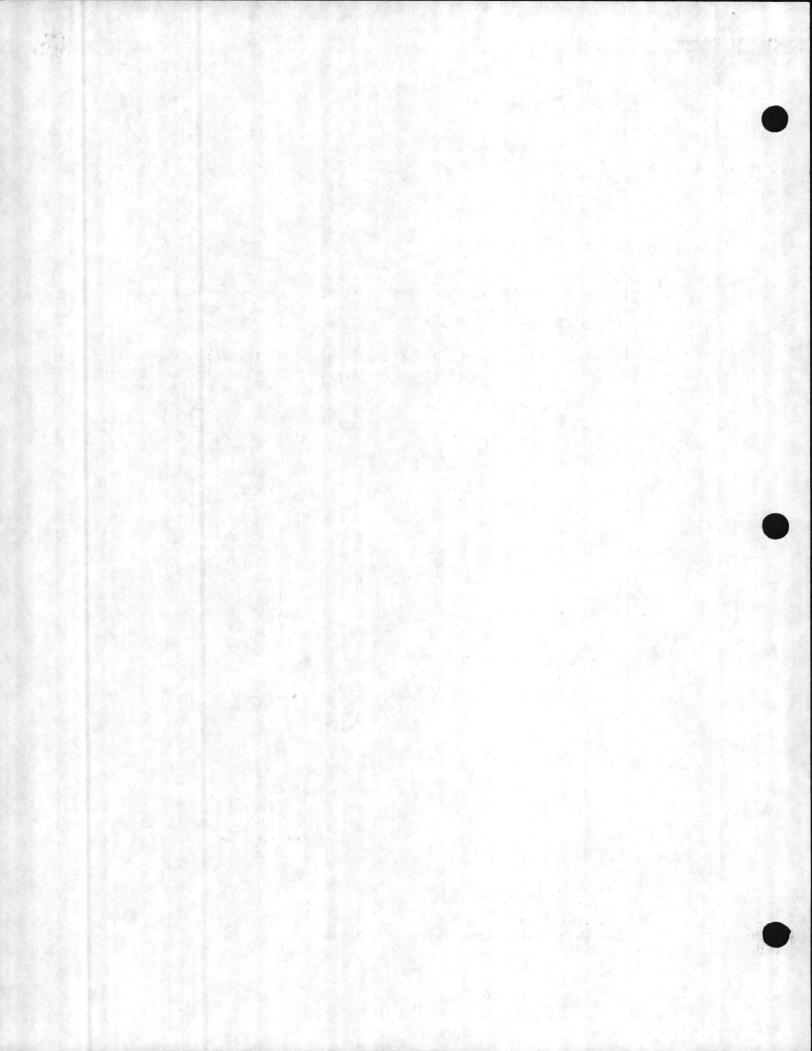
14.

Sincerely,

166/1228

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

Enclosures



June 19, 1978

Colonel C. D. Wood Base Maintenance Officer U. S. Marine Corps Marine Corps Base Comp Lejeune, North Carolina 28542

Dear Colonel Wood:

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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.
- Inumdated 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.

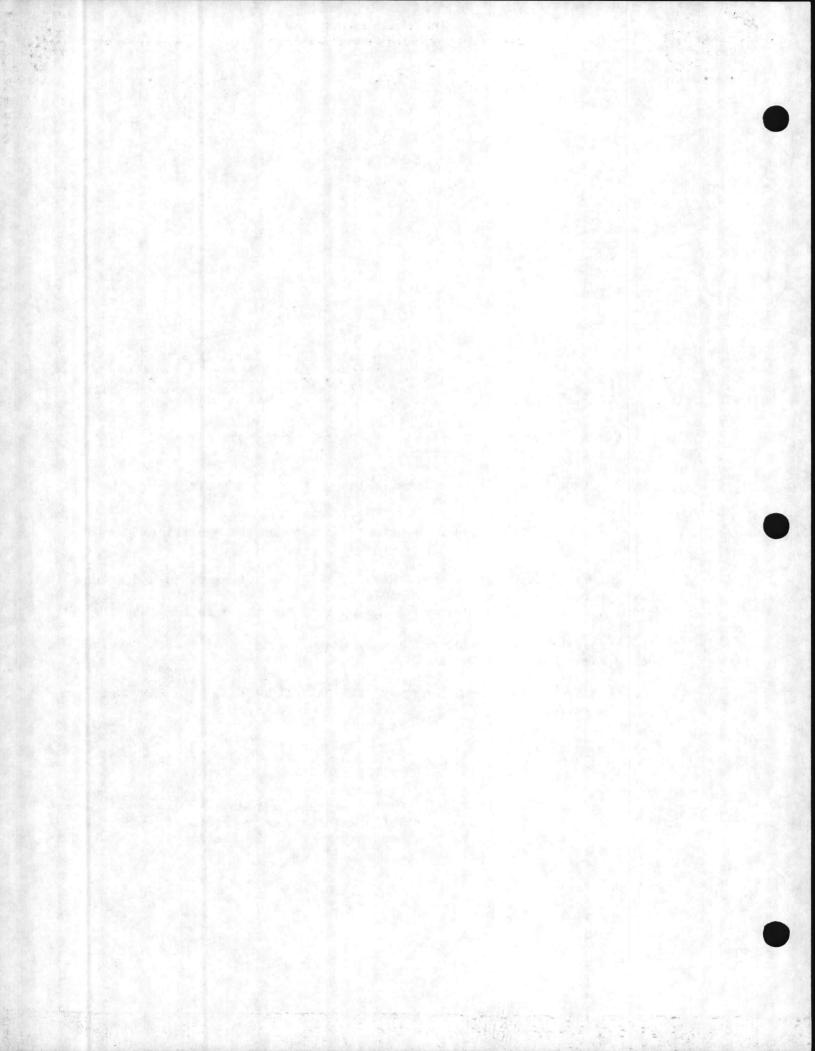
Sincerely,

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

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JCL/W88 cc: Mr. Wendall Neal Mr. Julian Wooten Mr. Fred J. Wood Mr. O. W. Strickland



MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542



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PW0:04:ELR:hf PWD 81-21 9 (64): 1982

REPLY REFER TO

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.

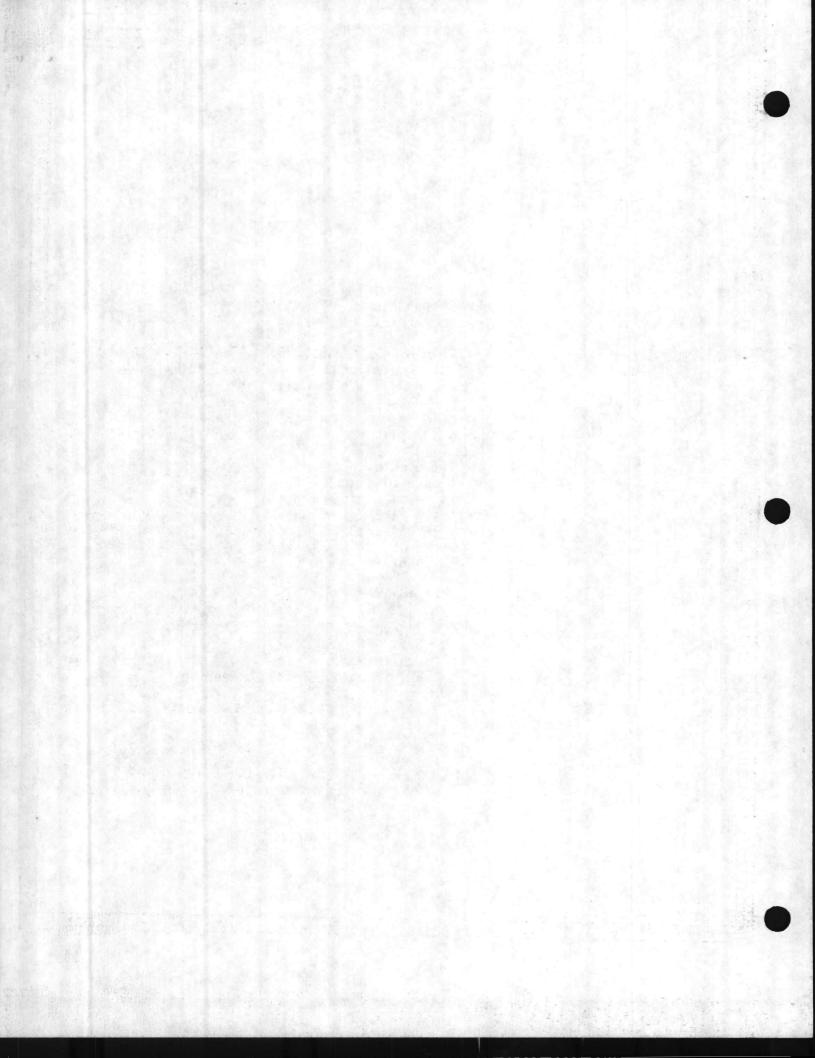
Please address questions, comments and correspondence to:

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

Enc1



PERMIT NO. 67-03

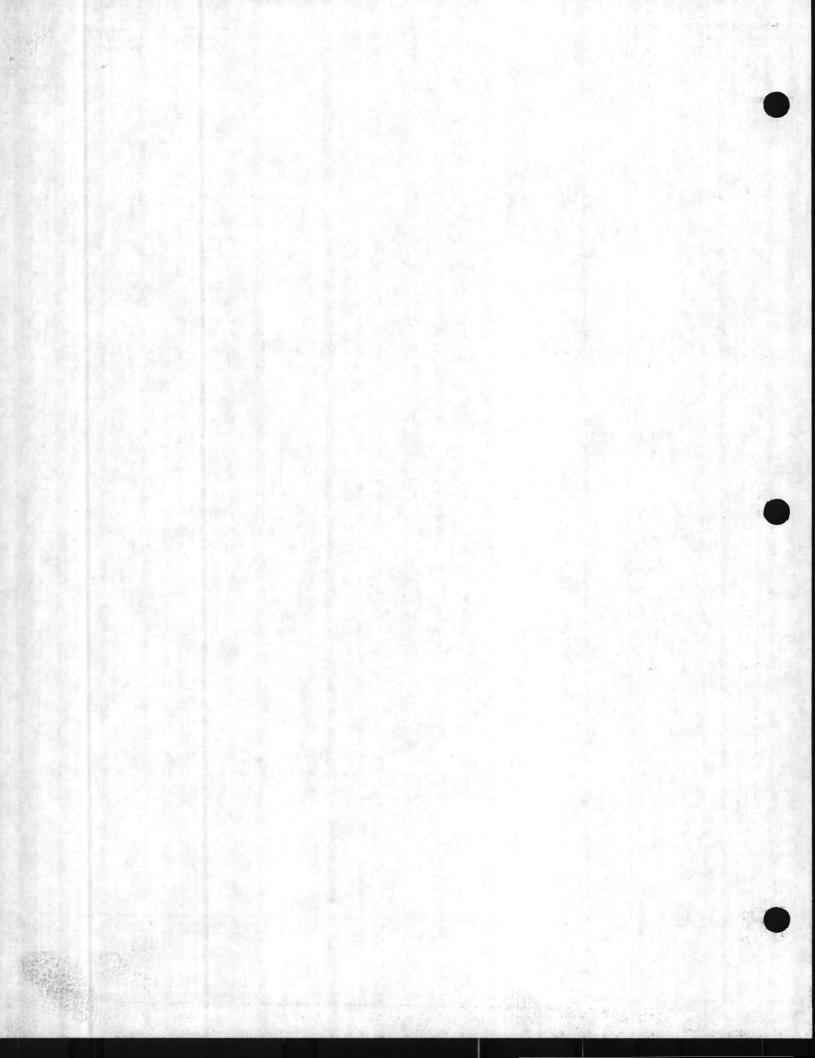
DATE ISSUED 7/20/82

SOLID WASTE PERMIT

Conditions of Permit:

- 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.
- 9. 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



July 20, 1982

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A DECEMBER OF A

Cormanding Ceneral 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:

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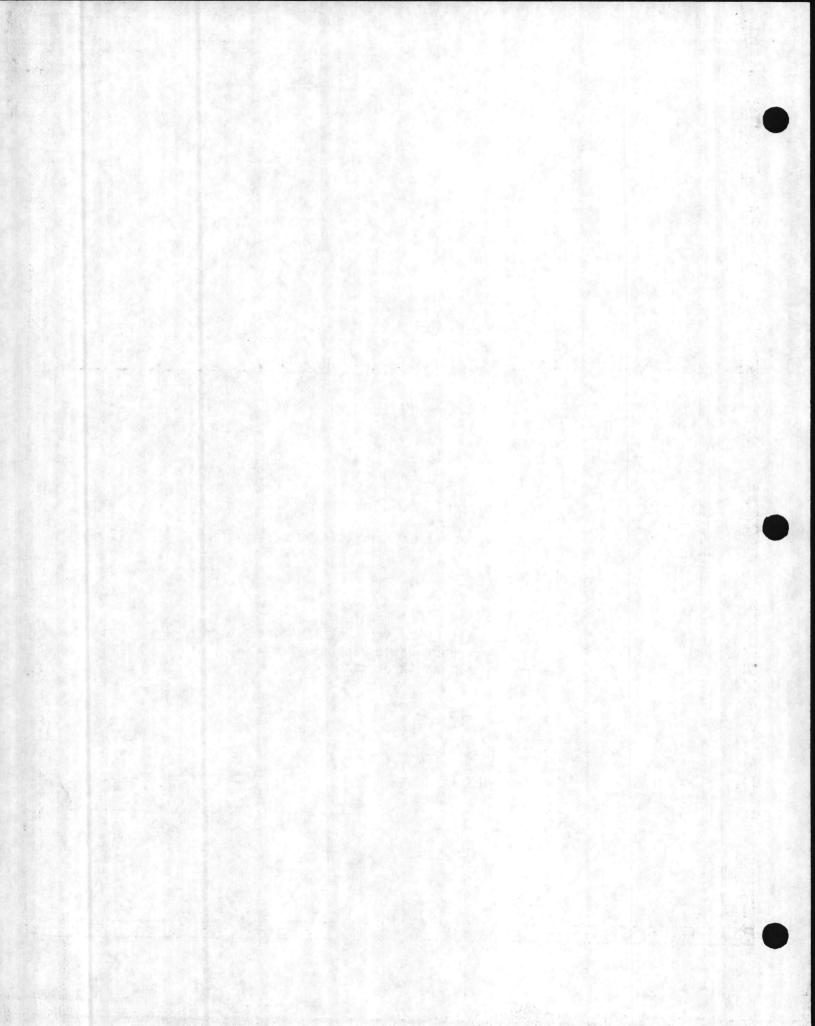
The enclosed plan is approved in accordance with G.S. 130-166. Permit No. 67-03 is issued under conditions provided for on the permit.

If you have any questions, please advise.

Respectfully,

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

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



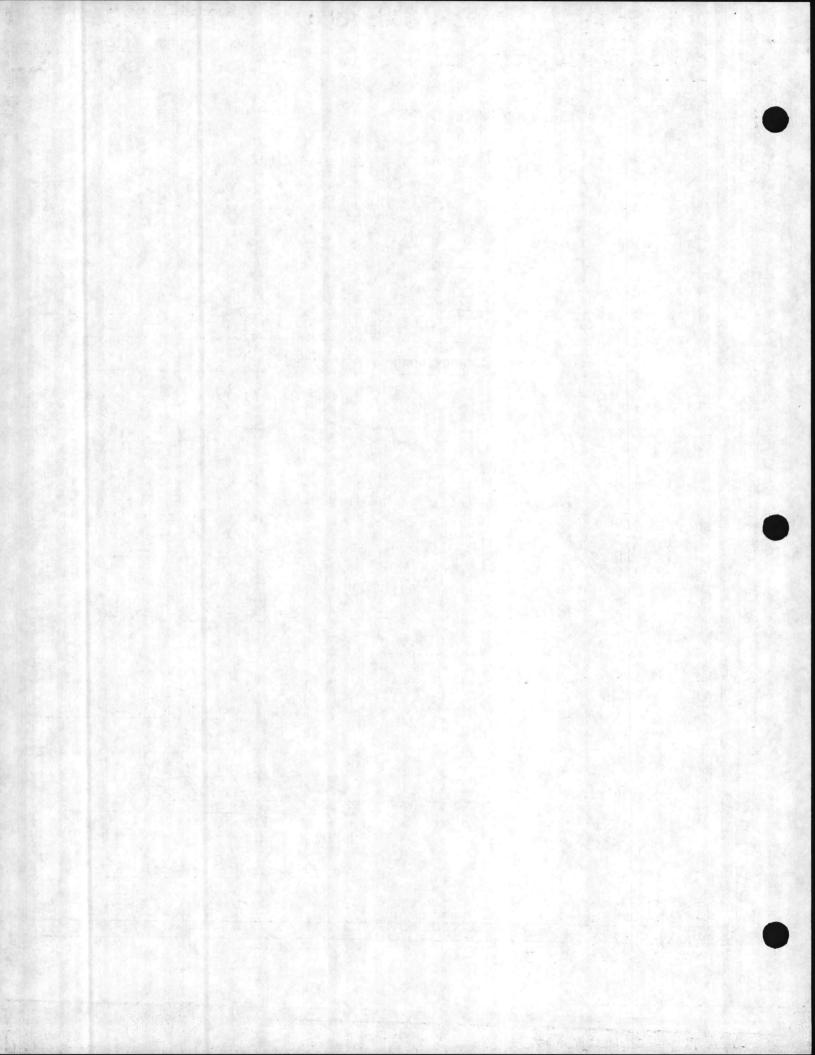
DAT STATE OF NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES Division of Health Services P.O. Box 2091 Raleigh 27602	TE ISSUED	7/20/82	
DEPARTMENT OF HUMAN RESOURCES Division of Health Services			XXXXXXXXXX
Division of Health Services			
			23
P.O. Box 2091 Raleigh 27602			
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			2000
SOLID WASTE PERMIT			~~~~~~~
CAMP LEJEUNE MARINE CORPS BASE is hereby	issued a	permit to	2000
perate a SANITARY LANDFILL			
ocated ON SNEADS FERRY ROAD (ONSLOW COUNTY)	e contration of the		, ,
n accordance with Article 13B of the General Statutes of Nor	th Carolin	na and all	
ules promulgated thereunder and subject to the conditions s	set forth i	in this	
ermit. The facility is located on the below described prop	perty.		
BEGINNING at a point 332,151.5691/2,508,793.014: thence N 28 ^o 22' 46" W 3,100 feet; thence N 61 ^o 37' 14" E 1,950 feet; thence S 28 ^o 22' 46" E 3,100 feet;			
thence S 61º 37' 14" W 1,950 feet; to the point of beginning. The above coordinates are relati	ive to the		

Strickland, Head Solid & Hazardous Waste Management Branch Environmental Health Section

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DHS Form 2871 (Rev. 1/82) Solid & Hazardous Waste Management Branch

N.C. Coordinate System.



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Konald H. Levine, M.D., M. STATE HEALTH DIRECT

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

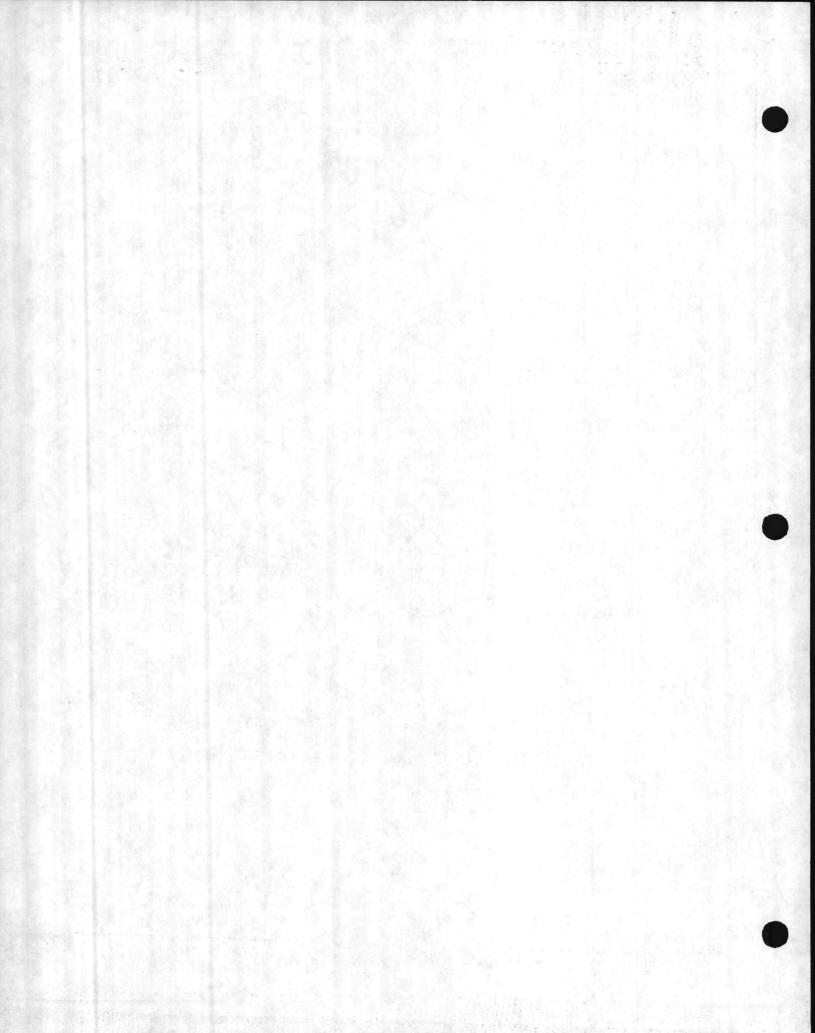
HYH

CERTIFIED COPY OF SOLID WASTE PERMIT

I do hereby certify that the attached PERMIT is an exact and true copy of Permit No. 107-03.

O. W. Strickland, Head Solid & Hazardous Waste Management Branch Environmental Health Section

North Carolina Wake County 1. Dell D. Sellers , a Notary Public for said County and State, do hereby certify that O.O. Schulland personally appeared before me this day and acknowledged the due execution of the foregoing instrument. Witness my hand and official seal, this the 26^{H} day of . 19 82. fficial seal) 1 Sellers Notary Public ____, 19<u>87.</u> My:commission expires NORTH CAROLINA, ONSLOW COUNTY The foregoing certificate(s) of Nell T. Sellers and Notary (ies) 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 1982 A. D. at 9:13 A Sclock A. M. Register of Deeds, Unslow County By Register of Deeds



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

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CERTIFICATION OF RECORDATION OF SOLID WASTE PERMIT

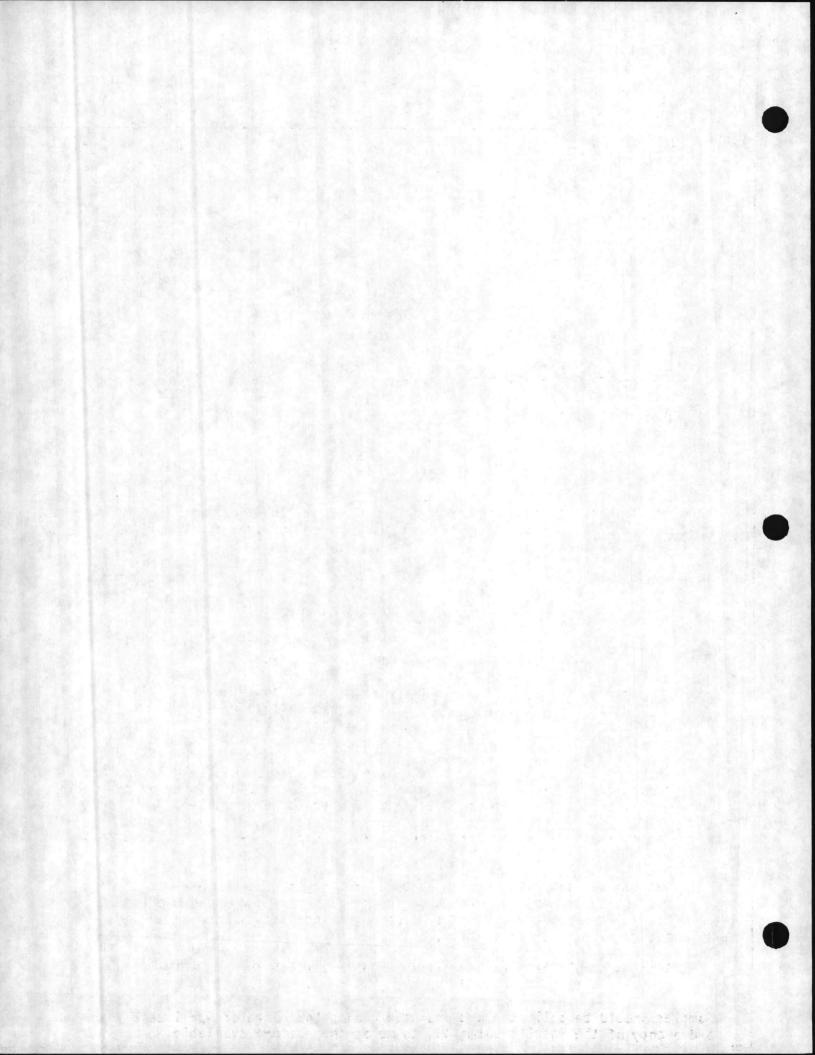
The Certified Copy of Permit # 67-03 was recorded on Page <u>630</u>, Book <u>866</u>; on this 26 day of August, 1982. 9:13 A.M. Mildud M. Alonar Register of Deeds 9:13 A.M.

(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.

STATE OF NORTH CAROLINA



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

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

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:

Θ

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:

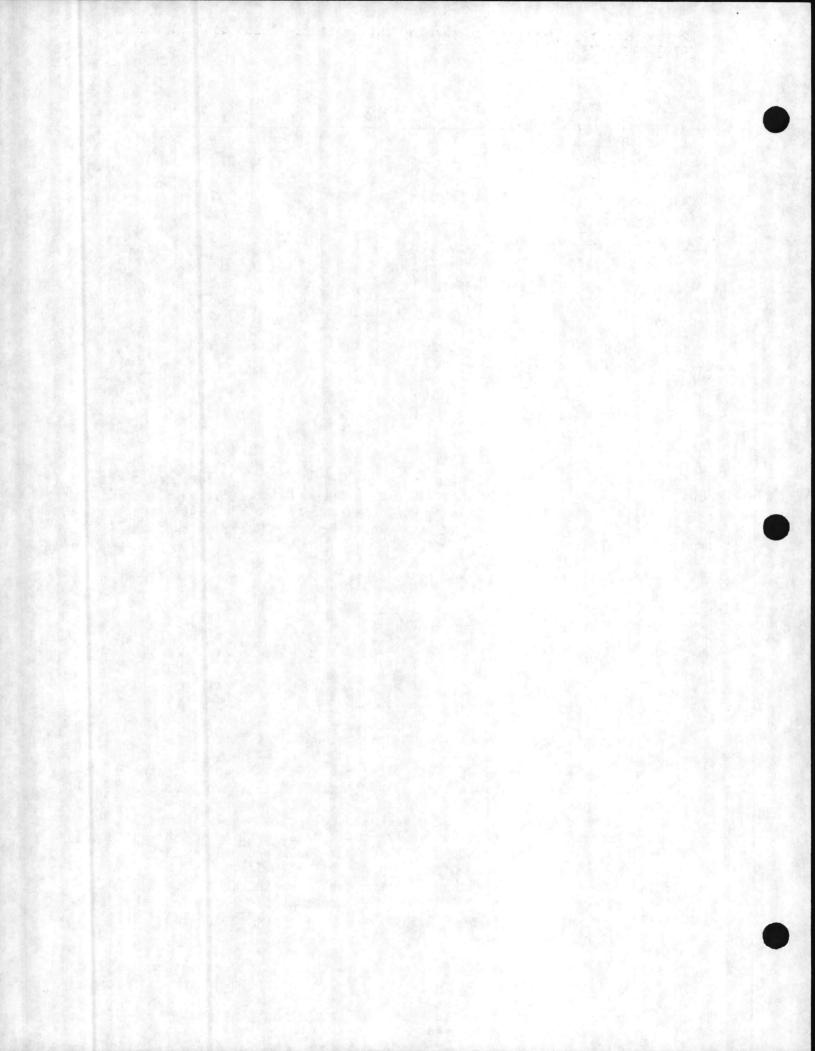
Arsenic	Lead	Nitrate	Color	
Barium	Mercury	Fluoride	Iron	
Cadmium	Selenium	Chloride	Manganese	
Chromium	Silver	Copper	Sulfate	
pH		Total Organic Carbon		
Total Dissolved Solids		Total Organic Halogen		
Zinc		Water Elevation		
Conductivit	у			

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.

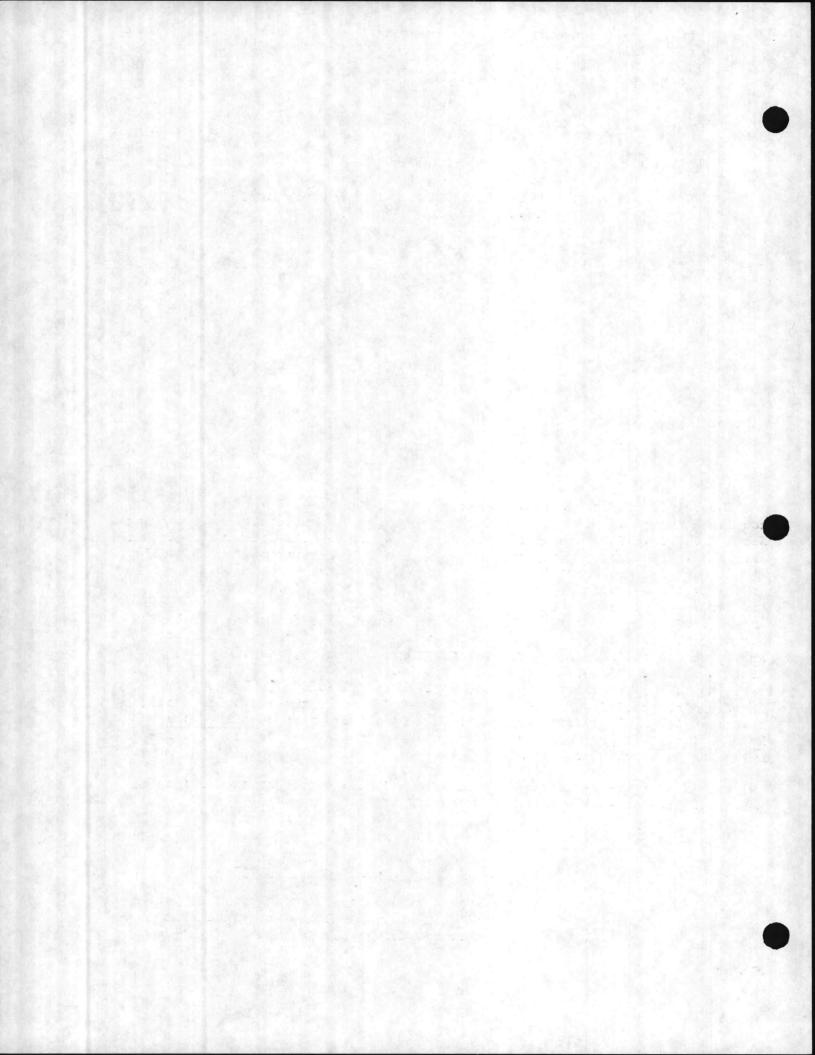
Sincerely,

E Sall any

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

UNSLOW CU.

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 Sorth 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.

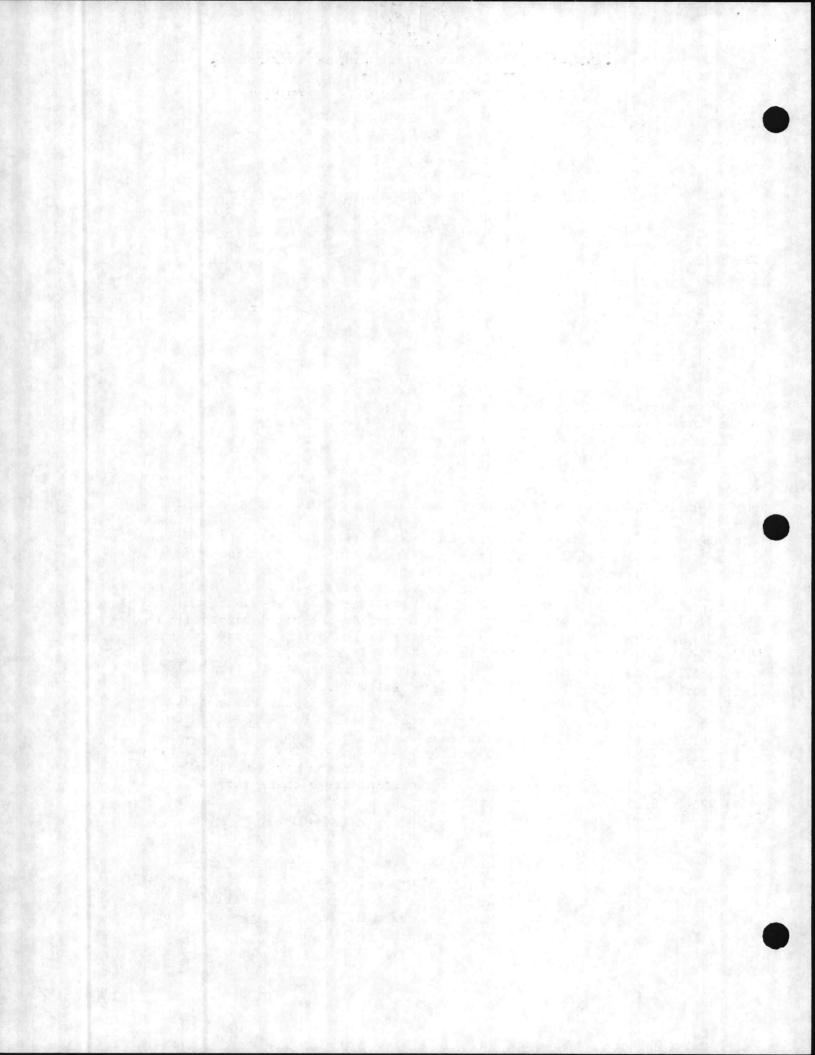
Your assistance is greatly appreciated and please contact this office at (919) 733-2178 if you have further comments or questions

Yours Sincerely,

middle ?

Michael L. Babuin, Hydrogeologist Solid & Hazardous Waste Management Branch Environmental Health Section

MLB/mj





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.

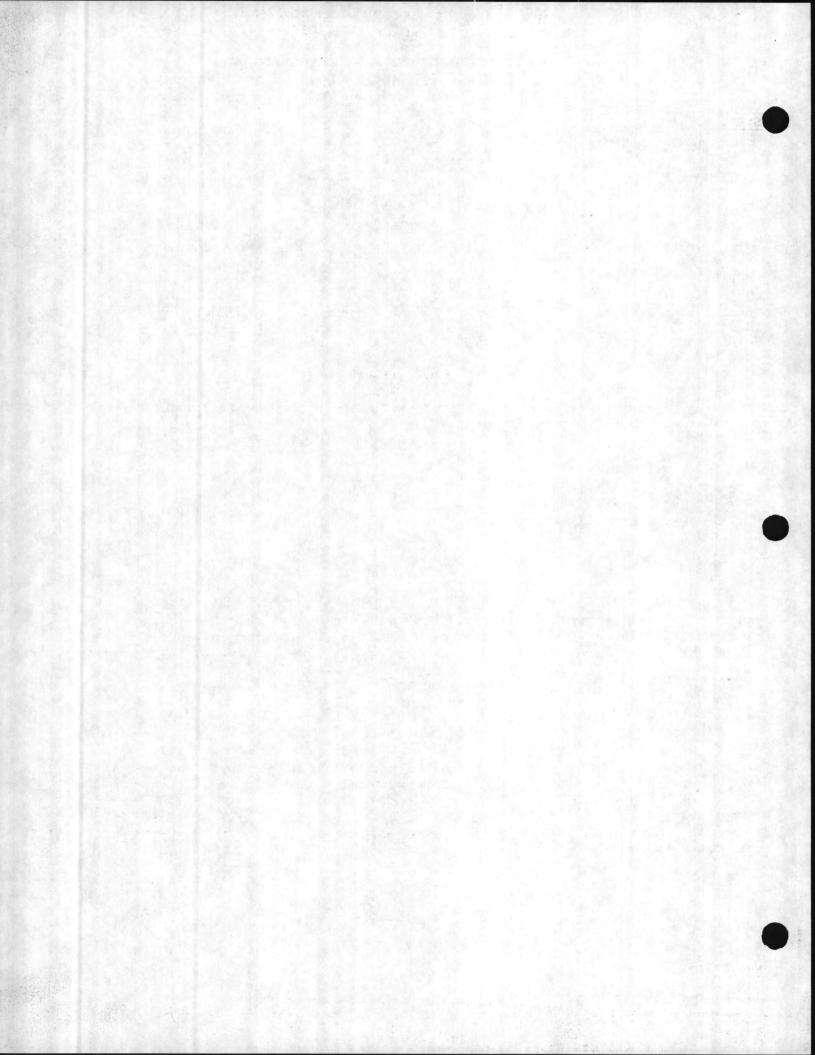
Yours sincerely,

Shones E. V.2l

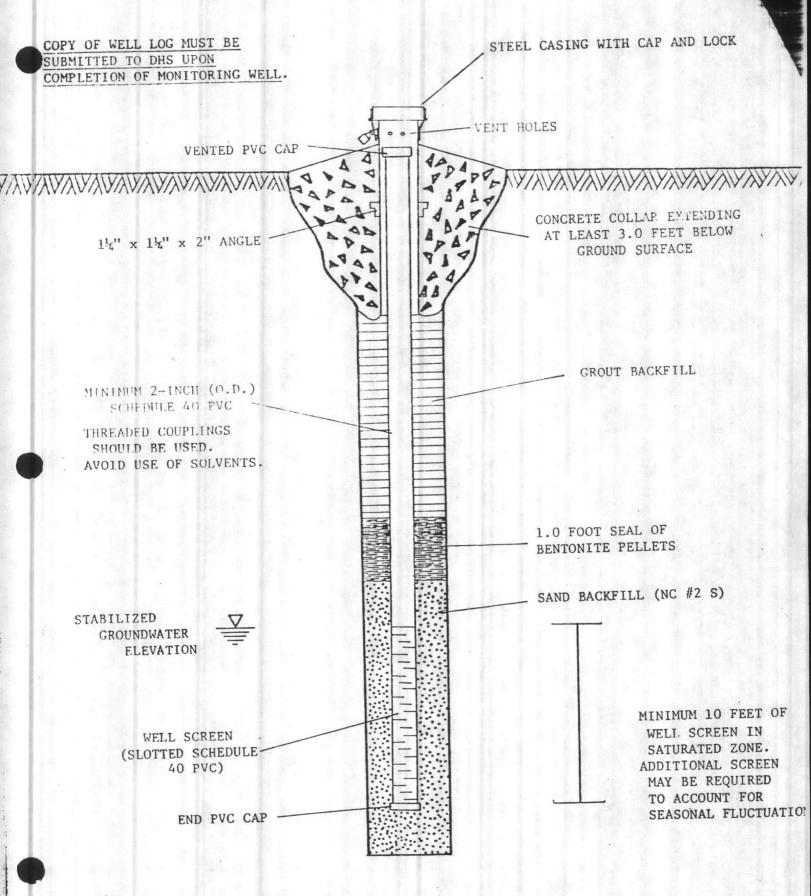
Tom Will, Hydrogeological Technician Solid & Hazardous Waste Management Branch Environmental Health Section

TW/mj/6213pg12

cc: M.L. Babuin



SOLID & HAZARDOUS WASTE MANAGEMENT BRANCH DIVISION OF HEALTH SERVICES



Rev. 5/82

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