

6240  
NREAD  
29 May 1985

Mr. W. B. Edwards, Jr.  
NCRD/DEM, Laboratory Branch  
Post Office Box 27687  
Raleigh, North Carolina 27611

Dear Sir:

The enclosed application for Wastewater Analytical Laboratory Certification is submitted in accordance with your letter of April 5, 1985. Our present National Pollutant Discharge Elimination System permit number is NC0003239. It is our understanding that your agency has assigned a separate number to each of our seven Sewage Treatment Plants. This application satisfies requirements applicable to the Camp Geiger Sewage Treatment Plant (NC0003239); Tarawa Terrace Sewage Treatment Plant (NC0020923), and Hadnot Point Sewage Treatment Plant (NC0020877).

Except as shown in Section VII 2 of the enclosed form, all laboratory analyses are performed by the Water Quality Control Laboratory, Natural Resources and Environmental Affairs Division, Marine Corps Base, Camp Lejeune. If additional information is desired, please contact Ms. Elizabeth A. Betz, Supervisory Chemist at (919) 451-5977.

Sincerely,

J. I. WOOTEN  
Director

Blind copy to:  
SupvChem

Writer: D. Sharpe, NREAD 5003



STATE OF NORTH CAROLINA  
DEPARTMENT OF NATURAL RESOURCES & COMMUNITY DEVELOPMENT  
DIVISION OF ENVIRONMENTAL MANAGEMENT

APPLICATION  
FOR  
WASTEWATER ANALYTICAL LABORATORY CERTIFICATION

I. Name of Laboratory <sup>(1)</sup> Water Quality Control Laboratory

Mailing Address Natural Resources & Environmental Affairs Div., MCBase  
Street or Box No.  
Camp Lejeune, NC 28542  
City State Zip

Location 65 Molly Pitcher Drive, Hadnot Point Area  
Street or Box No.  
Camp Lejeune North Carolina 28542  
City State Zip

Telephone Number (919)-451-5977

II. Laboratory Personnel

A. Laboratory Supervisor Elizabeth A. Betz, Supervisory Chemist

1. Education - Give your complete education history below:

Penncrest High School Media, PA 19063 Mo. June Yr. 1975  
High School Name Location Date Graduated

Education Beyond High School	Name & Location	Credits (Sem. or Qtr.Hrs)	Last Yr. Attended	Degree or Diploma & Yr. Rec'd	Major Subject
College or University	High Point College	Quantity sufficient for Degree	1979	BS	Chemistr
Graduate or Professional					
Other Education, Internship, etc.					

List fields of work for which you are licensed, registered, or certified, giving date(s) and sources(s) of issuance. Wastewater Operator, Crade II

N. C. Water Treatment Operator B-Well

(1) If this is a wastewater treatment plant (WWTP) with no onsite laboratory, enter the WWTP name and address and complete sections VII and VIII only.

2. Experience:

(a) Title of present position Supervisory Chemist

Date employed Nov 1979 Full-Time X Years 5 Months 6

No. employees supervised by you 4 Part-Time \_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_  
 (If part-time no. hours per week \_\_\_\_\_)

Employer Camp Lejeune MCBase Address Camp Lejeune, NC 28542

Duties Supervise laboratory; responsible for monitoring Water Treatment, Wastewater Treatment and Hazardous Waste.

(b) Title of next to last position N/A

Date employed \_\_\_\_\_ Full-Time \_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_

Date Separated \_\_\_\_\_ Part-Time \_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_

No. employees supervised by you \_\_\_\_\_ (If part-time no. hours per week \_\_\_\_\_)

Name and title of supervisor \_\_\_\_\_

Employer \_\_\_\_\_ Address \_\_\_\_\_

Duties \_\_\_\_\_

(c) Title of next position N/A

Date employed \_\_\_\_\_ Full-Time \_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_

Date Separated \_\_\_\_\_ Part-Time \_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_

No. employees supervised by you \_\_\_\_\_ (If part-time no. hours per week \_\_\_\_\_)

Name and title of supervisor \_\_\_\_\_

Employer \_\_\_\_\_ Address \_\_\_\_\_

Duties \_\_\_\_\_

3. References - persons familiar with your professional competency:

- (a) Danny Sharpe, Supervisory Ecologist, PO Box 743, Richlands, NC 28571
- (b) Julian Wooten, Dir, NREAD, Marine Corps Base, Camp Lejeune, NC 28542
- (c) Don Beesley, LabCert. Evaluator, DHS, PO Box 28047, Raleigh, NC 27602

B. Other Laboratory Personnel

Name	Education	Years of Analytical Laboratory Experience
See attached sheet		

B. Other Laboratory Personnel

Hoy J. Burns

Education: High School, 1 year College

Certifications: Dept. of Health, Education & Welfare Clinical  
Laboratory Technologist, North Carolina Wastewater Operator  
Grade II

Experience: Navy Clinical Laboratories - 11 yrs. Navy Research  
Laboratories - 9 yrs. Quality Control Laboratory - 9 yrs.

Robert J. Lachapelle, 2 yrs. College, Navy Medical Technologist  
School

Certifications: Certified Medical Technologist

Experience: Navy Laboratories - 17 yrs. Quality Control Lab-  
oratory - 4 yrs

Gaines B. Huneycutt, Jr.

Education: High School, AAS in Fish & Wildlife Management

Certifications: North Carolina Water Treatment Operator  
Grade C-Well

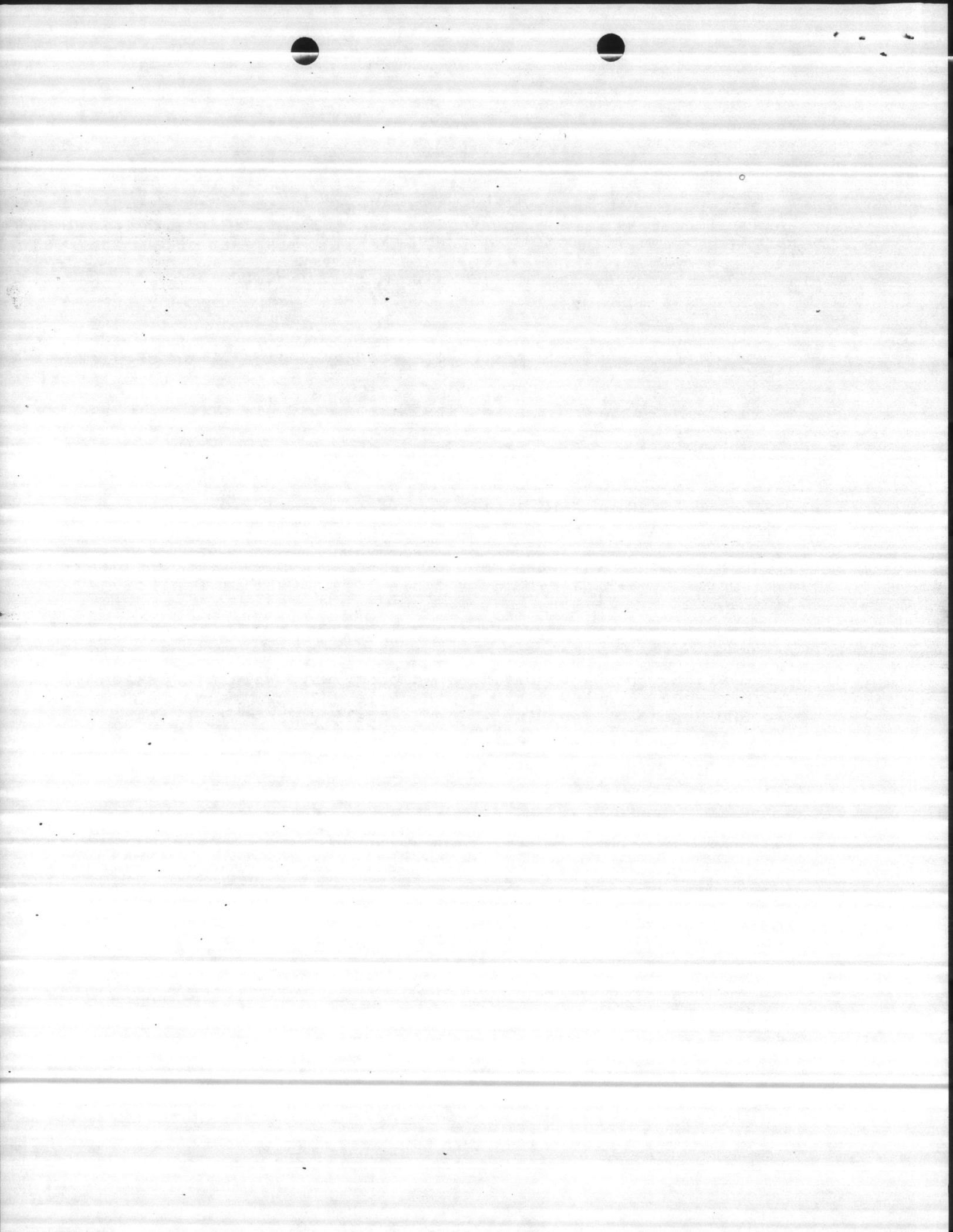
Experience: N.C. Department of NatRes & ComDev- 6.5 yrs.  
Contracts & Engineers Services - 1 yr; Quality Control  
Laboratory - 4 yrs.

Thomas H. Barbee

Education: High School, BS in Biology with Wildlife Option

Experience: VA Hospital in Asheville, NC - 2 yrs;

ECU School of Medicine - 1 yr. Quality Control Laboratory -  
1 yr.



Parameters presently identified in our Permit

III. Parameters for which certification may be requested: Laboratories need to obtain certification only for those parameters which will be reported to the state in compliance with monitoring and pretreatment regulations. Please (1) circle your choice of analytical method in each instance from the list to the right of the parameter, and (2) cite your usual minimum reporting concentration for it to the far right.

Analytical Parameter	Reference			Min. Report Concentration (incl. Units)
	1979 EPA Methods	15th Ed. Standard Methods	Others Include Reference & Methods	
BOD	405.1	507		1 mg/L
COD	410.1	508A		
	410.2			
	410.3			
	410.4			
Chloride	325.3	407A		
	325.2	407B		
	325.1	407D		
Coliform, Fecal MF	124 <sup>(1)</sup>	909C		1/100 ML
Coliform, Total MF	108 <sup>(1)</sup>	909A		1/100 ML
Coliform, Fecal Tube	132 <sup>(1)</sup>	908C		<4/100 ML
Coliform, Total Tube	114 <sup>(1)</sup>	908A		<4/100 ML
Cyanide	335.2	412B		
	335.3	412C		
		412D		
Fluoride	340.2	413A		
	340.1	413B		
	340.3	413C		
		413E		
Grease and Oil	413.1	503A		1 mg/L
Hardness, Total	130.1	314B		
	130.2	314A		
	215.1+ 242.1			
MBAS	425.1	512A		

(1) Coliform procedures taken from "Microbiological Methods for Monitoring the Environment", 1978, EPA-600/8-78-017.

Analytical Parameter	Reference			Min. Report Concentration (incl. Units)
	1979 EPA Methods	15th Ed. Standard Methods	Others Include Reference & Methods	
<b>Metals Group I</b>				
Aluminum	202.1	303C		
	202.2	304		
		306B		
Beryllium	210.1	303C		
	210.2	304		
		309B		
Cadmium	213.1	303A		
	213.2	303B		
		304		
		310B		
Chromium, Total	218.3	303A		
	218.1	303B		
	218.2	304		
		312A		
Cobalt	219.1	303A		
	219.2	303B		
		304		
Copper	220.1	303A		
	220.2	303B		
		313B		
Iron	236.1	303A		
	236.2	303B		
		304		
		315B		
Lead	239.1	303A		
	239.2	303B		
		304		
		316B		
Manganese	243.1	303A		
	243.2	303B		
		304		
		319B		

Analytical Parameter	Reference			Min. Report Concentration (incl. Units)
	1979 EPA Methods	15th Ed. Standard Methods	Others Include Reference & Methods	
Nickel	249.1	303A		
	249.2	303B		
		304		
Zinc	289.1	303A		
	289.2	303B		
		304		
<u>Metals Group II</u>				
Antimony	204.1	303A		
	204.2	304		
Silver	272.1	303A		
	272.2	303B		
		304		
Thallium	279.1	303A		
	279.2	304		
Arsenic	206.5	303E		
	206.3	304		
	206.2	307B		
	206.4			
Barium	208.1	303C		
	208.2	304		
Mercury	245.1	303F		
	245.2			
Selenium	270.2	304		
	270.3	303E		
Ammonia, Nitrogen	350.2	417A		
	350.3	417B		
	350.1	417D		
		417F		
Total Kjeldahl Nitrogen (TKN)	351.3	420A		
	351.1	420B		
	351.2	417D		
	351.4	417B		
	417E			

Analytical Parameter	Reference			Min. Report Concentration (incl. Units)
	1979 EPA Methods	15th Ed. Standard Methods	Others Include Reference & Methods	
Nitrate plus Nitrite	353.3	418C		
Nitrogen	353.2	418F		
	353.1			
Total Phosphorus	365.2	424C (111)		
	365.3	424F		
	365.1	424G		
	365.4			
Orthophosphate	365.1	424G		
	365.2	424F		
	365.3			
pH	150.1	423		0.1 Unit
Phenols	420.1	510A <sup>(2)</sup>		
		510B <sup>(2)</sup>		
	420.2	510C <sup>(2)</sup>		
Residue, Total	160.3	209A		
Residue, Suspended	160.2	209D		1 mg/L
Turbidity	180.1	214A		

(2) Standard Methods, 14th Edition

#### IV. Laboratory Test Equipment

Instrument	Manufacturer/Model	Used in Analysis For:
pH/Dissolved Oxygen Meter	Orion 611	Dissolved Oxygen pH
Oven	Fisher Model 215F	Solids
Coliform Incubator Bath	GCA/Precision Scientific	Fecal Coliform MF
Dry Air Incubator	Elconap	Total Coliform MF
Incubator	Precision Model 815	BOD
Autoclave	Market Forge Sterilmatic	Sterilizing Micro Equipment
Dry Air Incubator	Precision Model 2	Total & Fecal Coli MF
Oven	Fisher Model 438F	Oil & Grease
Water Bath	Precision	Oil & Grease
Shaker	Kraft Model S-500	Oil & Grease
Analytical Balance	Mettler H33	Solids & Oil & Grease
Vacuum Pump	Precision	Solids, Coliform

(Use additional space if required)



## VI. Laboratory Type

1. Is your laboratory applying for certification as a commercial laboratory? Yes ( ) No (X)
2. Is your laboratory applying for certification as a municipal or industrial laboratory? Yes (X) No ( ).
3. Is your laboratory performing wastewater analysis for clients in North Carolina? Yes (X) No ( )
4. Does your laboratory wish to seek clients in North Carolina? Yes ( ) No (X).

## VII. Municipal and Industrial Wastewater Treatment Plants Only

1. Enter your NPDES Permit Number NC0003239; NC002087.7 and NC0020923
2. Are state required monitoring analyses for this facility performed by another laboratory? Yes ( ) No (X).  
If yes, give the name and address of the laboratory and the parameters performed by that laboratory.

NOTE: Plant personnel measure or test for flow and pH.

Remaining analyses are performed by Water Quality Control Laboratory.

VIII. This statement certifies that the information contained in this application is truthful and accurate to the best of my knowledge.

Date 29 May 1985

Signature of Applicant  
ELIZABETH A. BETZ  
Supervisory Chemist  
Title

To apply for certification, return two copies of this application to:

W. B. Edwards, Jr.  
NRCD/DEM, Laboratory Branch  
P. O. Box 27687  
Raleigh, N. C. 27611