

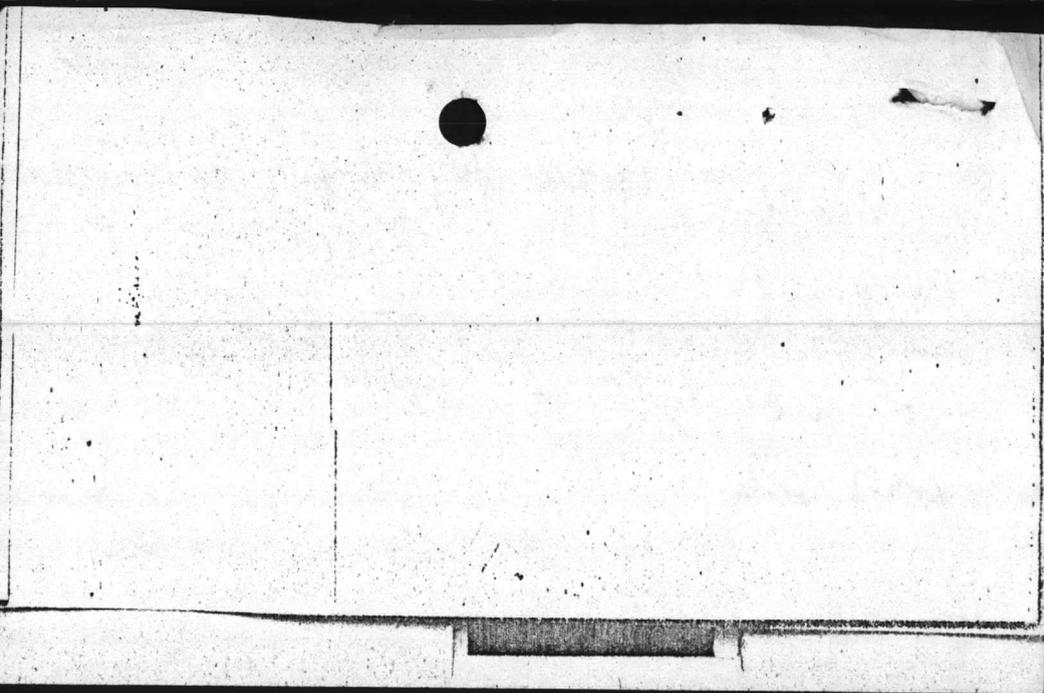
Twylabe,

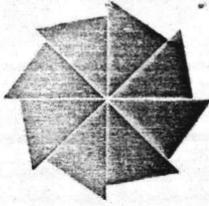
Make a copy for my file  
as one for LANT DIV Charles  
Thompson

---

Put Oct 1, 1982 update in  
your file

J W Love Jr





6280/4

# North Carolina Department of Natural Resources & Community Development

James B. Hunt, Jr., Governor

Howard N. Lee, Secretary

DIVISION OF ENVIRONMENTAL MANAGEMENT

July 31, 1981

D.B. Barker  
Major General, U.S. Marine Corps  
Commanding  
Marine Corps Base  
Camp Lejeune, North Carolina 28542

Subject: Permit No. 3769R3  
Marine Corps Base  
Camp Lejeune, North Carolina

Dear General Barker:

In accordance with your application received June 22, 1981, we are forwarding herewith Permit No. 3769R3 to Marine Corps Base, Camp Lejeune, North Carolina for the construction and/or operation of air pollution abatement facilities and/or emission sources.

If any parts, requirements, or limitations contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing before a hearing officer upon written demand to the Director within thirty (30) days following receipt of this permit, identifying the specific issues to be contended. Unless such demand is made, this permit shall be final and binding.

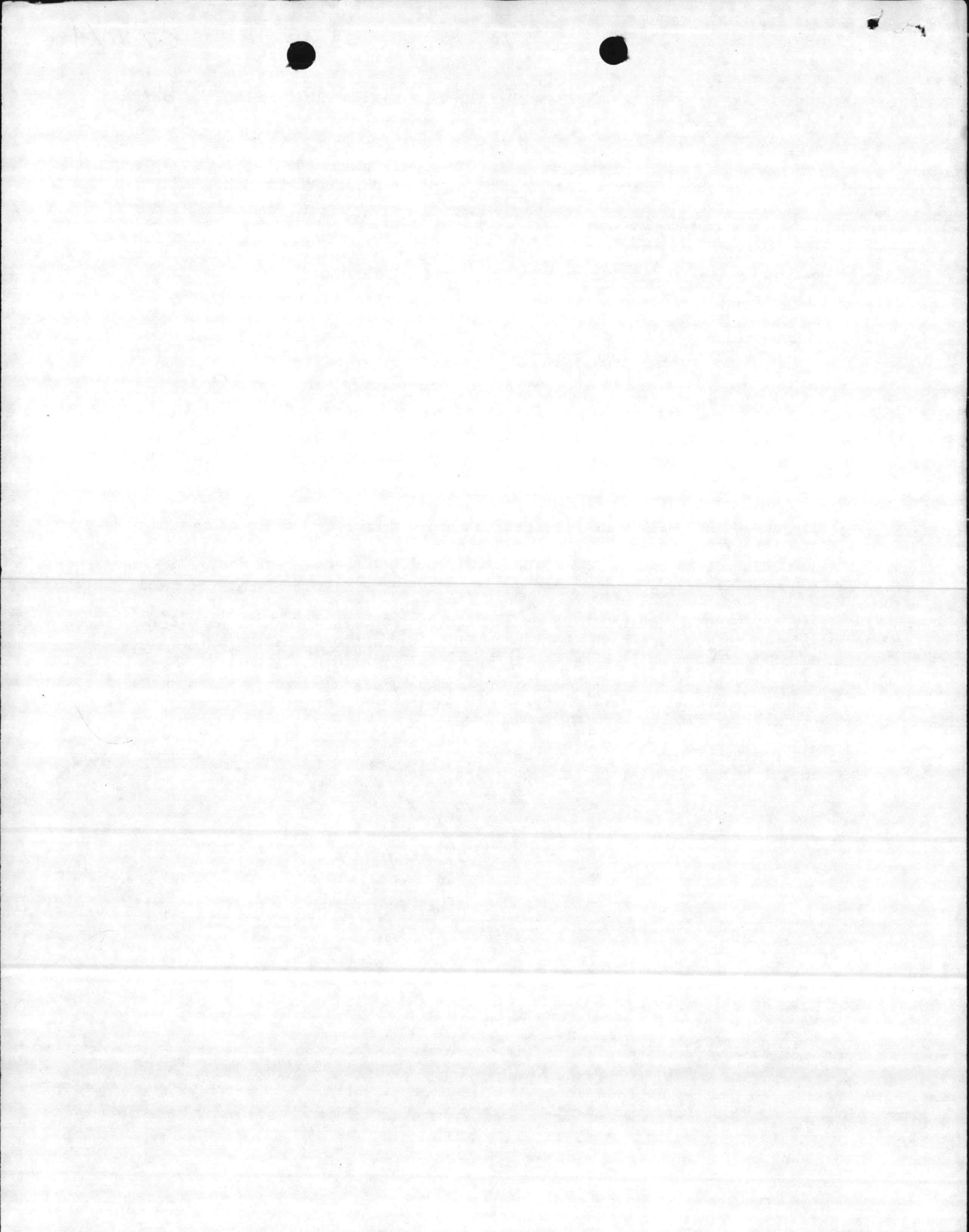
This permit shall be effective from the date of issuance until October 1, 1982, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Sincerely,

Charles Wakild  
Regional Supervisor

Enclosures

cc: Mike Sewell  
Robert Jamieson  
Wilmington Regional Office  
Central Files



NORTH CAROLINA  
ENVIRONMENTAL MANAGEMENT COMMISSION  
DEPARTMENT OF NATURAL RESOURCES & COMMUNITY DEVELOPMENT

Raleigh

P E R M I T

For the Discharge of Air Contaminants Into the Atmosphere

In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules and Regulations,

PERMISSION IS HEREBY GRANTED TO

Marine Corps Base  
Camp Lejeune, North Carolina

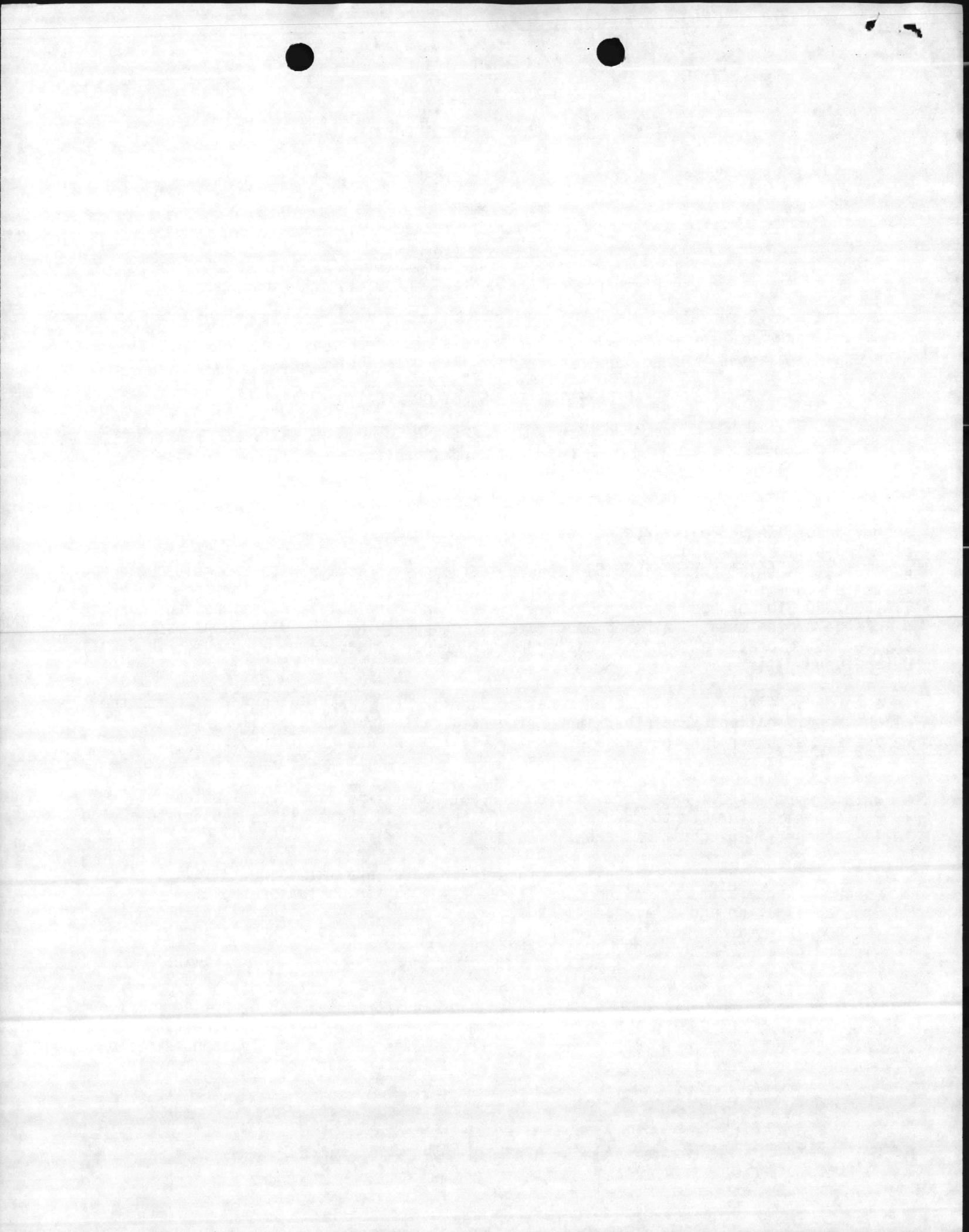
FOR THE

operation of a No. 6 oil fired boiler (121 x 10<sup>6</sup> BTU per hour heat input) and air cleaning devices and appurtenances consisting of two single stage, dry type electrostatic precipitators (plate area of 36,540 square feet each) in series with two multicyclones installed on the exhausts from four coal/No. 6 oil-fired boilers (maximum heat input of 114,500,000 BTU per hour each) to remove visible and particulate emissions, and for the discharge of the treated air and associated stack gases into the outdoor atmosphere at its facility located at Central Heating Plant, Hadnot Point, Camp Lejeune, North Carolina, Onslow County,

in accordance with the application received June 22, 1981, and in conformity with the plans, specifications, and other supporting data, all of which are filed with the Department of Natural Resources & Community Development and are incorporated as part of this Permit.

This Permit shall be effective from the date of its issuance until October 1, 1982, is nontransferable to future owners and operators, and shall be subject to the following specified conditions and limitations:

1. The air cleaning devices shall be properly operated and maintained at all times in such a manner as to effect an overall reduction in air pollution in keeping with the application and otherwise to reduce air contamination to the extent necessary to comply with applicable Environmental Management Commission Regulations, including 15 NCAC 2D .0503, .0516, and .0521.
2. When particulate and/or visible emissions, due to a malfunction of the process or control equipment, are or may be in excess of Environmental Management Commission Regulations, the Regional Supervisor, Wilmington Region 919-256-4161, of the Division of Environmental Management shall be notified as promptly as possible but in no case later than twelve (12) hours following the start of such malfunction.

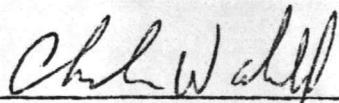


Such notice shall specify the nature and cause of the malfunction, the time when such malfunction was first observed, the expected duration, and an estimate of the rate of emission. The term malfunction shall not be construed to include start-up or shut-down periods when particulate, visible, or odorous emissions exceed Environmental Management Commission Regulations when the duration of such period is less than one hour. Furthermore, any period of duration one hour or greater when particulate, visible, or odorous emissions exceed Environmental Management Commission Regulations shall be construed as a malfunction.

3. Reports on the operation and maintenance of the facilities shall be submitted to the Division of Environmental Management at such intervals and in such form and detail as may be required by the Division. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
4. Marine Corps Base, Camp Lejeune, at least ninety (90) days prior to the expiration of this Permit, shall request its extension by letter. The letter should include the permit number and a description of modifications, if any, that have been made.
5. This permit is subject to revocation or modification upon a determination that information contained in the application or presented in support thereof is incorrect, conditions under which the permit renewal was granted have changed, or violations of conditions contained in the permit have occurred.
6. A violation of any term or condition of this Permit shall subject the Permittee to enforcement procedures contained in North Carolina General Statutes 143-215.114, including assessment of civil penalties.

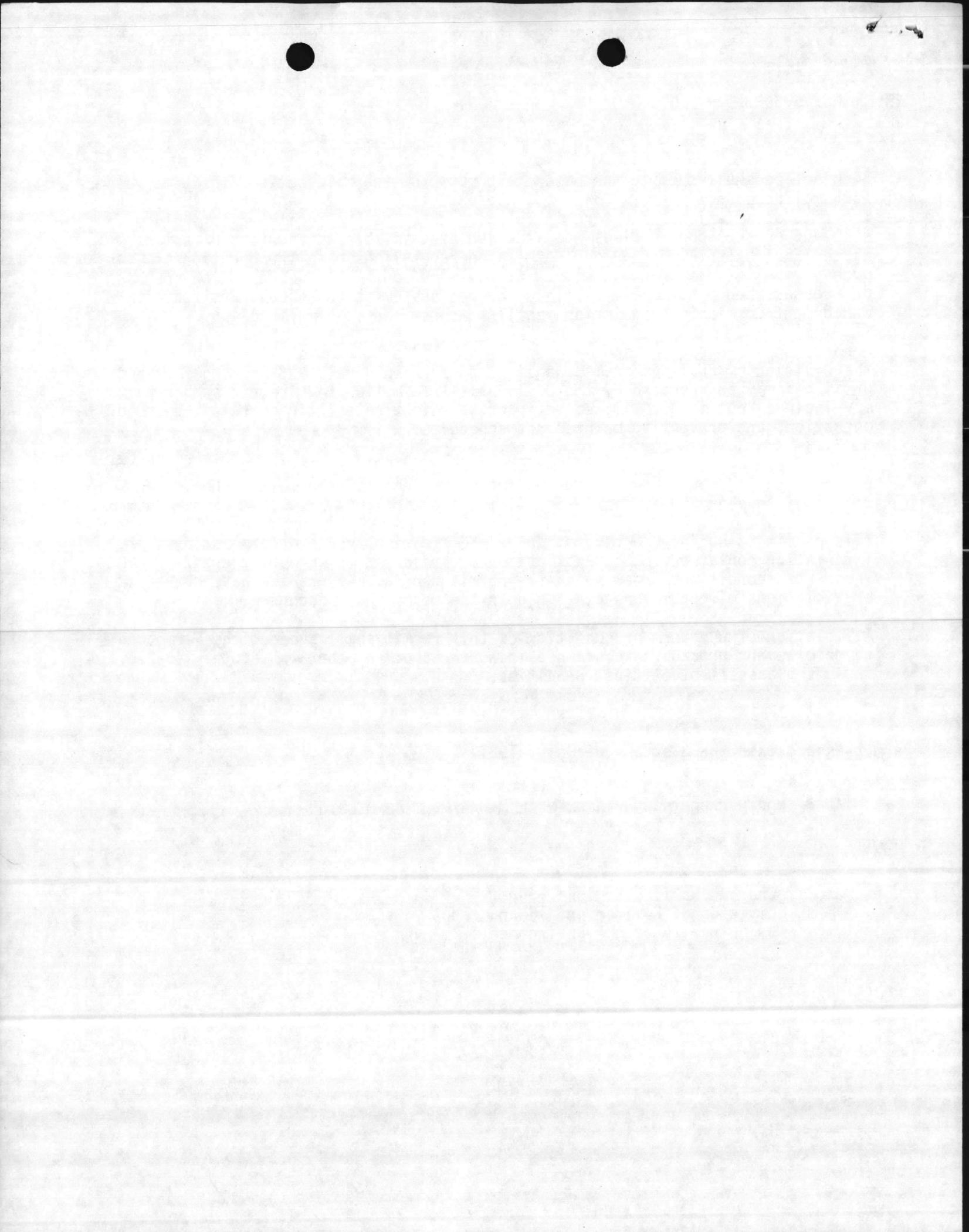
Permit issued this the 31st day of July, 1981.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



---

Charles Wakild, Regional Supervisor  
Division of Environmental Management  
By Authority of the Environmental Management Commission





UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

*ack 7/17/81 nec* *C*  
*WCC*

IN REPLY REFER TO  
MAIN/TH/rn  
13700  
17 JUN 1981

*Wayne*

Mr. Charles Wakild  
Regional Supervisor  
Department of Natural Resources  
and Community Development  
Division of Environmental Management  
7225 Wrightsville Avenue  
Wilmington, NC 28403

Dear Mr. Wakild:

In accordance with North Carolina Administrative Code, Title 15, Chapter 2, Subchapter 2H, Section .0603, application is hereby made for renewal of Permit No. 3822, covering the operation of a No. 6 oil-fired boiler (121 x 10<sup>6</sup> BTU per hour heat input) and appurtenances, and for the discharge of the associated stack gases in the Hadnot Point area of Camp Lejeune.

No modifications or alterations have been made to the permitted boiler subsequent to the issuance of the original permit. Repair work that has been made in the boiler room includes replacement of a stop-check valve, expansion loop, and header stop valve in the steam discharge line between the boiler and the plant steam header, which in no way alters the operating parameters of the boiler.

If you have any further question on this matter, please contact Mr. Danny Sharpe, Base Maintenance Department, telephone (919) 451-5003.

Sincerely,

*D B Barker*

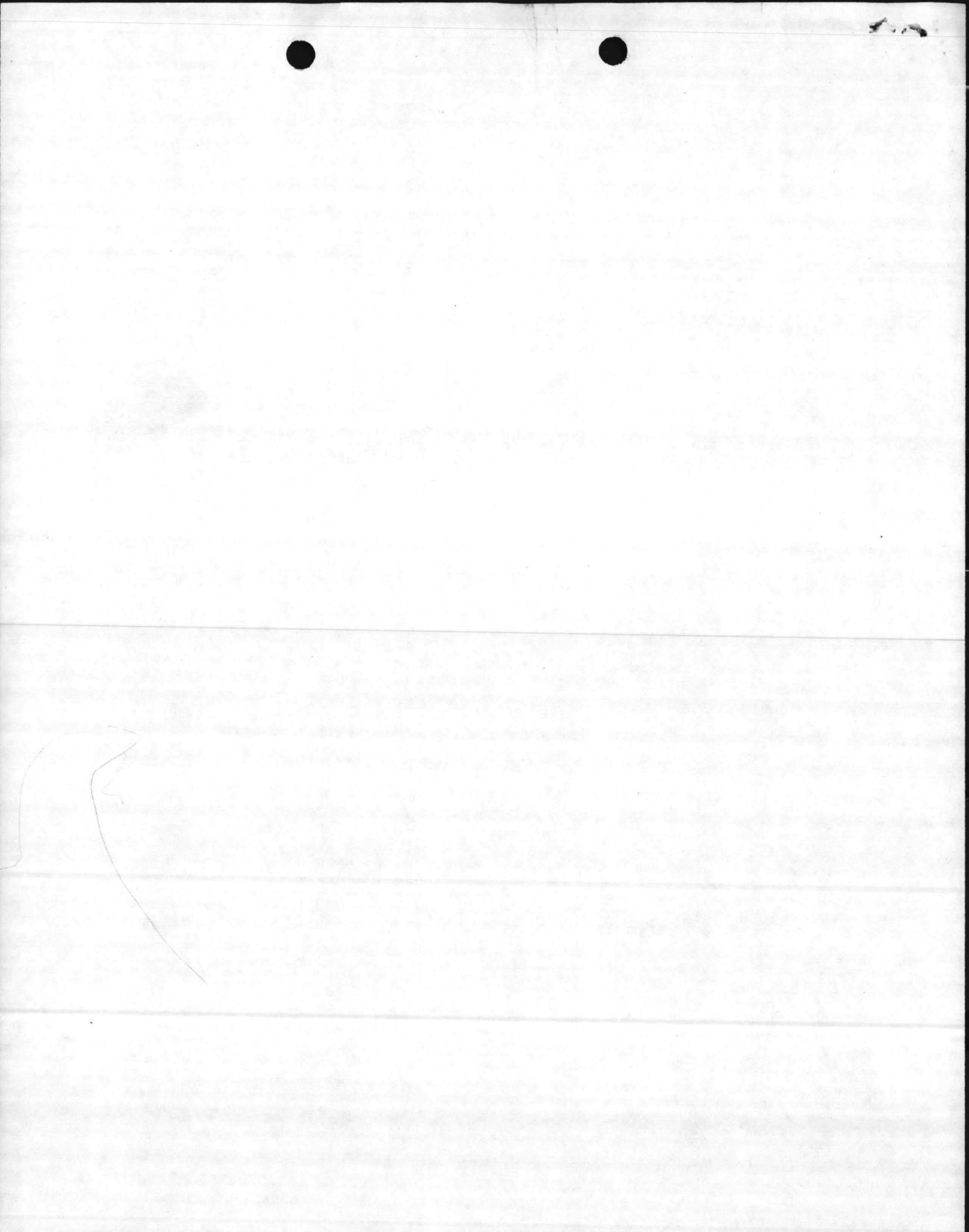
D. B. BARKER  
Major General, U. S. Marine Corps  
Commanding General

*Bill, acknowledge receipt.  
Combine with permit for  
4 coal boilers and specify  
location; i.e., Central Heating  
Plant, ~~the~~ — St., Hadnot  
Point, Camp Lej., Onslow Co.  
*C**

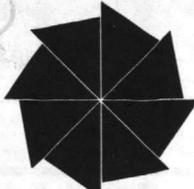
RECEIVED

JUN 1981

WILMINGTON REGIONAL OFFICE  
DEM



*Danny's  
Shrimp*



# North Carolina Department of Natural Resources & Community Development

James B. Hunt, Jr., Governor

Joseph W. Grimsley, Secretary

*Bm 6280/4 pwo*

## DIVISION OF ENVIRONMENTAL MANAGEMENT

June 23, 1982

Mr. K. P. Millice, Jr.  
United States Marine Corps  
Camp Lejeune, NC 28542

Dear Colonel Millice:

This is to acknowledge receipt of an Air Permit application on June 22, 1982, for U.S. Marine Corps Central Heating Plant, Hadnot Point, Camp Lejeune, North Carolina, Onslow County.

This application is being processed and reviewed by the Wilmington Regional office. If you have any questions concerning this matter, please contact that office at (919)256-4161.

Sincerely,

*Mike Sewell*

Mike Sewell, Supervisor  
Air Permits

MS/dg

cc: Mr. Chuck Wakild

| ROUTING ORDER |     | INT                                 |
|---------------|-----|-------------------------------------|
| 1             | 10  | <input checked="" type="checkbox"/> |
| 2             | 04  | <input type="checkbox"/>            |
| 3             | 408 | <input type="checkbox"/>            |
| 4             |     | <input type="checkbox"/>            |
| 5             |     | <input type="checkbox"/>            |
|               | ORG | INT                                 |

CERTIFICATE BOND

25% POSITION FEE

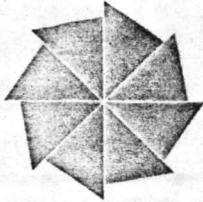
*Copy sent to Util - 2 July 82*

RECEIVED  
JUN 29 1982

W:Kc 26ms11



RECEIVED  
JUN 29 1982  
PUBLIC WORKS DEPT.  
CAMP LEJUNE, N.C.



North Carolina Department of Natural  
Resources & Community Development

James B. Hunt, Jr., Governor

Howard N. Lee, Secretary

May 8, 1978

F. W. Tief, Commanding General  
Marine Corps Base  
Camp Lejeune, North Carolina 28542 ✓

Dear General Tief:

Subject: Permit No. 3769  
Marine Corps Base  
Camp Lejeune, North Carolina

In accordance with your application received February 17, 1978, we are forwarding herewith Permit No. 3769 to Marine Corps Base, Camp Lejeune, North Carolina for the construction and operation of air cleaning devices and appurtenances consisting of two single stage, dry type electrostatic precipitators (plate area of 36,540 square feet each) in series with two multicyclones installed on the exhausts from four coal/No. 6 oil-fired boilers (maximum heat input of 140,000,000 BTU per hour each) to remove visible and particulate emissions, and for the discharge of the treated air and associated stack gases into the outdoor atmosphere at its facility located at Camp Lejeune, North Carolina, Onslow County.

This Permit shall be effective from the date of its issuance until July 1, 1982, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

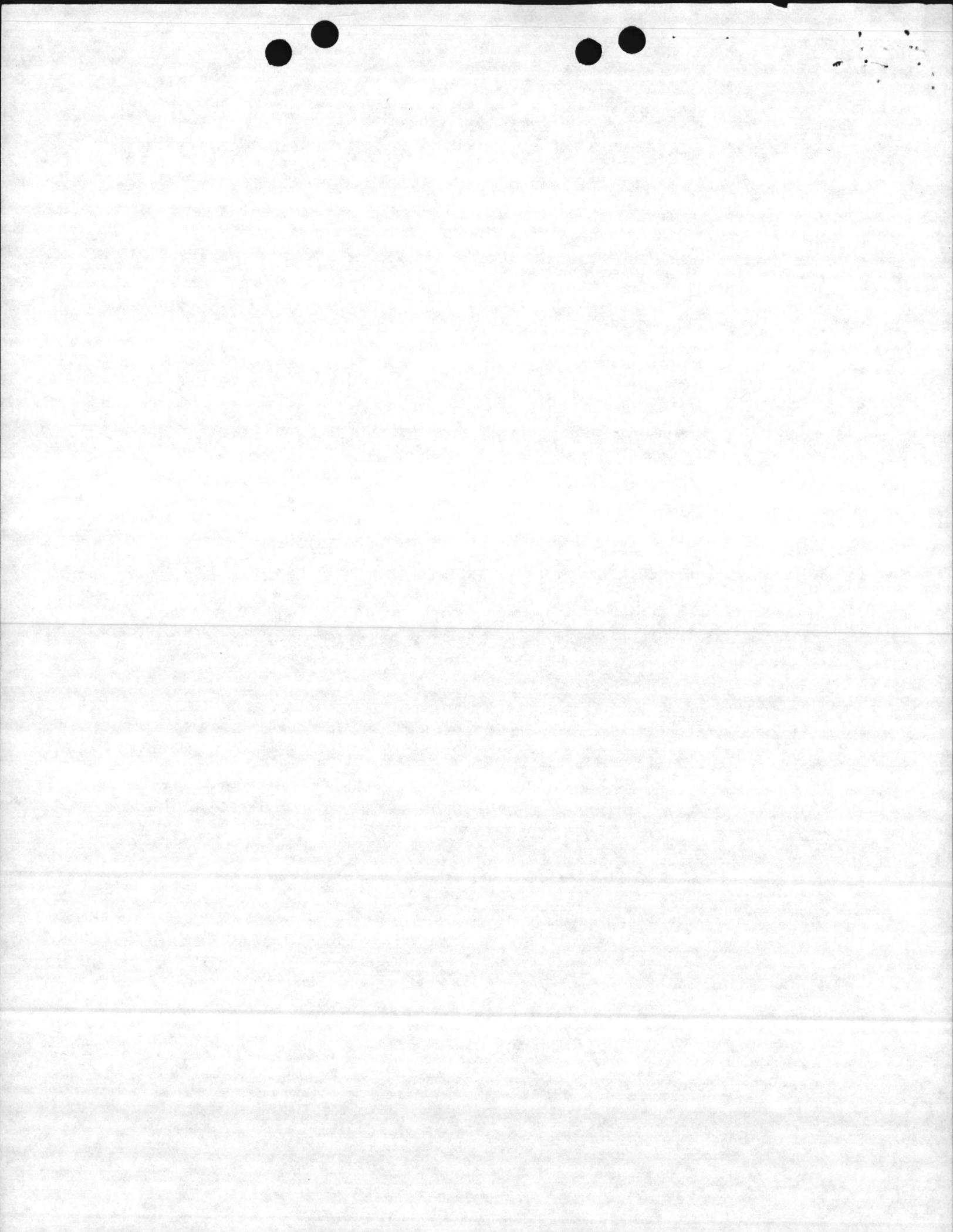
One set of the Permit Application containing plans and specifications is being returned to you with this letter.

Sincerely,

*A. F. McRorie*  
for A. F. McRorie, Acting Director  
Division of Environmental Management

JHL:db

Enclosure



NORTH CAROLINA

ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF NATURAL RESOURCES & COMMUNITY DEVELOPMENT

Raleigh

P E R M I T

For the Discharge of Air Contaminants Into the Atmosphere

---

In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules and Regulations,

PERMISSION IS HEREBY GRANTED TO

Marine Corps Base  
Camp Lejeune, North Carolina

FOR THE

construction and operation of air cleaning devices and appurtenances consisting of two single stage, dry type electrostatic precipitators (plate area of 36,540 square feet each) in series with two multicyclones installed on the exhausts from four coal/No. 6 oil-fired boilers (maximum heat input of 140,000,000 BTU per hour each) to remove visible and particulate emissions, and for the discharge of the treated air and associated stack gases into the outdoor atmosphere at its facility located at Camp Lejeune, North Carolina, Onslow County,

in accordance with the application received February 17, 1978, and in conformity with the plans, specifications, and other supporting data, all of which are filed with the Department of Natural Resources and Community Development and are incorporated as part of this Permit.

This Permit shall be effective from the date of its issuance until July 1, 1982, is nontransferable to future owners and operators, and shall be subject to the following specified conditions and limitations:

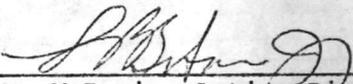
1. This Permit shall become voidable unless the air cleaning devices are constructed in accordance with the approved plans, specifications and other supporting data and are completed and placed in operation on or before April 30, 1979, or as this date may be amended by provision of a subsequent Special Order or Permit issued by the Environmental Management Commission.
2. The air cleaning devices shall be properly operated and maintained at all times in such a manner as to effect an overall reduction in air pollution in keeping with the application and otherwise to reduce air contamination to the extent necessary to comply with applicable Environmental Management Commission Regulations, including 15 NCAC 2D .0503, .0516 and .0521.

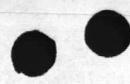


3. Reports on the operation and maintenance of the facilities shall be submitted to the Division of Environmental Management at such intervals and in such form and detail as may be required by the Division. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
4. A violation of any term or condition of this Permit shall subject the Permittee to enforcement procedures contained in North Carolina General Statutes 143-215.114, including assessment of civil penalties.

Permit issued this the 8th day of May, 1978.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

*for*   
\_\_\_\_\_  
A. F. McRorie, Acting Director  
Division of Environmental Management  
By Authority of the Secretary of the Department  
of Natural Resources & Community Development



NORTH CAROLINA  
ENVIRONMENTAL MANAGEMENT COMMISSION  
RALEIGH

RECD FEB 17 1978

APPLICATION FOR  
A "PERMIT"  
TO CONSTRUCT AND OPERATE AIR  
POLLUTION ABATEMENT FACILITIES AND/OR EMISSION SOURCES

Filed By: Brigadier General F. W. Tief  
(Name)

Marine Corps Base  
(Address)

Camp Lejeune, North Carolina

AQ-22 Rev. 11/73

Enclosure (1)



APPLICATION FOR A "PERMIT"  
 To Construct and Operate Pollution Abatement Facilities and/or Emission Sources  
 Three Copies to be Submitted  
 Fourth Copy Should be Retained by Applicant

FEB 15 1978

Date: \_\_\_\_\_

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, application is hereby made by Marine Corps Base, Camp Lejeune  
 (Name of Company, Establishment, Town, Etc.) (Include Division or Plant Name in Addition to Parent

in the County of Onslow at Jacksonville, N. C.  
 (Street and City or Town Address of Plant or Facility)  
 for issuance of a "Permit" to construct and operate air pollution abatement facilities and/or emissions sources at above location as specified in the accompanying drawings, specifications, and other pertinent data:

- Nature of Operation Conducted at the Above Facility: Military operations
- Description of Process(es) Whose Emission(s) is/are to be Controlled by the Facility or Source(s) Which is/are to be Constructed or Altered. (Complete Section I)  
coal fired steam plant
- Furnish Type and Narrative Description of Proposed Control Device(s). (Complete Appropriate Supplemental Data Sheets for Control Device to be Installed and/or Operated. Include Make and Model Number of Control Device(s) and Number of Identical Units).  
two single stage, dry type, electrostatic precipitators

| 4. Contaminant Emitted: | Weight Rate of Emissions (lb/hr): |                     | Control Efficiency (%): |                     |
|-------------------------|-----------------------------------|---------------------|-------------------------|---------------------|
|                         | Without Control Device            | With Control Device | Without Control Device  | With Control Device |
| particulate             | 565                               | 28                  | 77.5%                   | 96%                 |

5. Name and Address of Engineering Firm that Prepared Plans: Noonan, Inc. of South Carolina, Greenville, South Carolina

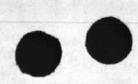
6. Ultimate Disposition of Collected Pollutants: sanitary landfill on base  
 7. Date on Which Facilities are to be Completed and in Operation: April, 1979

8. Indicate Period of Time for Which Facilities are Estimated to be Adequate: 30 Years  
 9. Estimate Cost of Air Pollution Control Device \$ 1,798,000

10. Hours Facility is Operated Per Year: continuous  
 Name: Brigadier General F. W. Tief Mailing Address: Marine Corps Base  
Camp Lejeune  
North Carolina 28542

Signature and Title: F. W. Tief  
F. W. TIEF  
Commanding General

Telephone Number: 451-5003



I. GENERAL DATA FOR PROCESSES

\*Attach detailed process engineering drawings, equipment drawings and flow diagrams for the process(es) or source(s) being constructed or altered.

Name of Process: coal fired steam plant

Total Weight of Materials Entering this Process: 20,722 lb/hr or ton/hr per 2 boilers

Volume and Temperature of Air Flow Entering Control Device: 97,300 CFM @ 355 °F

Volume and Temperature of Effluent at Discharge Point to Atmosphere: 97,300 CFM @ 355 °F

Pollutant(s) to be Controlled: particulate matter

Height of Process Stack or Vent Above Ground Level 120 ft. Inside area of Stack 33.2 ft<sup>2</sup>.

Particulate Emission Rate (Before Control) 565 lb/hr per 2 boilers

Particle Size Distribution: 0-10µ 75%, 10-20µ %, 20-30µ %, 30-40µ %, 40-50µ %, >50µ %

Gaseous Emission(s): Name (Chemical Formula) sulfur dioxide µg/m<sup>3</sup>, PPM or lb/hr 415 per 2 boilers

(max. expected sulfur dioxide) (535 per 2 boilers)

II. SUPPLEMENTARY DATA FOR INCINERATORS (Including Conical Incinerators)

Circle Type of Waste or Indicate Composition: Type 0 Type I Type II Type III Type IV

Combustible: % Non-Combustible: % Moisture: % Heat Value: BTU/lb

Total Waste Generated Per Day: lb. Hours Incinerator will be Operated: hrs/day

Design Capacity for Above Waste: lbs/hr Manufacturer and Model Number; Approximate Cost:

Primary Chamber Volume: ft.<sup>3</sup> Secondary Chamber Volume: ft.<sup>3</sup>

Air Requirements: Total Excess Air % Draft: Natural Induced Other Overfire Air: cfm Underfire Air: cfm

Is there an Electronically Controlled, Exhaust Gas Temperature Modulated, Damper Installed on the

Conical Incinerator for: Overfire Air Supply, Underfire Air Supply, Dome Temperature Set Point °F

Flame Port Temperature: °F Secondary Chamber Temperature: °F

Is there a Continuous Exhaust Gas Temperature Recorder? Yes No

Stack: Inside Area ft.<sup>2</sup> Height ft. Gas Velocity ft/sec Temperature °F Fan Capacity cfm Stack Lined?

Is there a Wet Scrubber?

Yes No Flow Rate of H<sub>2</sub>O into Scrubber gal/min Temperature Before Scrubber °F

Aux. Fuel: Oil Gas Other Burner Rating: Primary Chamber Secondary Chamber Stack BTU/hr BTU/hr BTU/hr

Primary Burner: Is there a Preheat Timer? Yes No Preheating Time: min.

Secondary Burner or Afterburner: Is there a Timer? Yes No Length of Time Burner is Operated min.

Is the Timer Reset by Charging Door? Yes No Other Mode of Burner Control

Type of Feed: Manual Automatic If Automatic, Describe

Distance from Incinerator to Nearest Structure(s) in which People Live and/or Work. ft.

Signature: Title:



ALL DATA PER BOILER

\*Attach detailed dimensioned drawing on sheet showing internal features of dryers, wood or coal fired boilers, and recovery devices.

Type of Fuel Burning Source STEAM BOILERS Stack Height Above Ground Level 120 ft. Inside Area of Stack 33.2ft<sup>2</sup>

Name and Model Number RILEY Volume of Furnace 5,000ft<sup>3</sup>

Specify Actual Amount of Each Fuel Used in Above Source (XX):

Coal 10,365lb/hr; Oil Grade \_\_\_\_\_ Amount \_\_\_\_\_ gal/hr, at \_\_\_\_\_ BTU/gal and \_\_\_\_\_ lb/gal or \_\_\_\_\_ lb/hr

Wood \_\_\_\_\_ lb/hr; Natural Gas \_\_\_\_\_ SCF/hr, at \_\_\_\_\_ BTU/SCF; Other \_\_\_\_\_  
(Specify type, amount and heating value)

Specify Maximum Rating for Each Fuel Burning Source:

Coal 120 MBTU/HR Oil \_\_\_\_\_ Wood \_\_\_\_\_ Natural Gas \_\_\_\_\_ Other \_\_\_\_\_

Maximum Sulfur Content of Fuel 1.3 % Specify Standby Fuel OIL Maximum % Sulfur 1.81

Type of Solid Fuel Burning Equipment Used: Hand Fired \_\_\_\_\_ Spreader Stoker \_\_\_\_\_ Underfeed Stoker \_\_\_\_\_ Chain Grate \_\_\_\_\_  
Traveling Grate \_\_\_\_\_ Pulverizer X Cyclone Furnace \_\_\_\_\_ Other (Specify) \_\_\_\_\_

Moisture Content of Fuel: \_\_\_\_\_ Specify Method and Schedule of Tube Cleaning, if Applicable:  
Coal 12 % Wood \_\_\_\_\_ % Other \_\_\_\_\_ % Lancing \_\_\_\_\_ Tube Blowing \_\_\_\_\_ Schedule \_\_\_\_\_

Automation Control Equipment (Describe in Detail in Sections IV and V)

Flue Gas Collection Device: Wet \_\_\_\_\_ Dry X Steam Injection \_\_\_\_\_ Air Injection \_\_\_\_\_ Is Collected Flyash Rejected? NO

Draft on Boiler (Natural \_\_\_\_\_ Induced X) 48,650fm at 355 °F

Total Number of Fuel Burning Sources Within Property Boundaries: 1,869

Maximum Capacity Rating, by Type, for All Fuel Burning Units Excluding that Itemized Above: (Total Like Units)

Coal \_\_\_\_\_ lb/hr Wood \_\_\_\_\_ lb/hr Oil 657 MBTU/HR Natural Gas \_\_\_\_\_ SCF/hr

IV. SUPPLEMENTARY DATA FOR WET COLLECTION DEVICES

\*Attach detailed engineering drawings of the control device and particle size versus removal efficiency curves.

Liquid Scrubbing Medium and Additives: \_\_\_\_\_

Total Liquid Injection Rate (Include Recirculated and Make-up Rates) \_\_\_\_\_ gal/min or gal/1000 ft<sup>3</sup>

Operating Pressure Drop Across Device \_\_\_\_\_ in H<sub>2</sub>O

ANSWER FOLLOWING QUESTIONS FOR SPECIFIC DEVICE:

VENTURI SCURBBER: Inlet Area \_\_\_\_\_ in<sup>2</sup> Throat Area \_\_\_\_\_ in<sup>2</sup> Throat Velocity \_\_\_\_\_ ft/sec

GRAVITY SPRAY CHAMBER: Number of Nozzles \_\_\_\_\_ Liquid Droplet Size \_\_\_\_\_ u Co-Current \_\_\_\_\_ Countercurrent \_\_\_\_\_

WET CYCLONE:

Body Diameter \_\_\_\_\_ in Length \_\_\_\_\_ in

PACKED TOWER OR PLATE TOWER:

Inlet Area \_\_\_\_\_ in<sup>2</sup> Number of Nozzles \_\_\_\_\_

Cross-Sectional Area \_\_\_\_\_ ft<sup>2</sup> Type of Plate \_\_\_\_\_

Outlet Area \_\_\_\_\_ in<sup>2</sup>

Length \_\_\_\_\_ ft Depth of Packing \_\_\_\_\_ ft

Number of Plates \_\_\_\_\_ Type of Packing \_\_\_\_\_

OTHER WET COLLECTION DEVICES: GIVE COMPLETE DESCRIPTION INCLUDING DESIGN PARAMETERS AND DETAILED ENGINEERING DRAWINGS.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



V. SUPPLEMENTARY DATA FOR DRY COLLECTION DEVICES

\*Attach detailed engineering drawings of the control device and particle size versus removal efficiency curves.

BAGHOUSES: Cloth Area \_\_\_\_\_ ft<sup>2</sup> Bag Material \_\_\_\_\_  
 Number of Compartments \_\_\_\_\_ Pressure - Drop Total \_\_\_\_\_ in H<sub>2</sub>O  
 Method of Cleaning \_\_\_\_\_ Air-to-Cloth Ratio \_\_\_\_\_ ft/min  
 Time Between Cleaning \_\_\_\_\_ mins, hrs

ELECTROSTATIC PRECIPITATORS: SEE ATTACHMENT 1

GENERAL:

Effective Area of Grounded Collector Plates 36,540 ft<sup>2</sup>  
 Number of Compartments or Chambers 1 Number of Cells per Compartment 3  
 Electrical Field Gradient at the Discharge or Emitting Electrodes 10 KV/in  
 Average Electrical Field Gradient at the the Grounded Collecting Electrodes 10 KV/in  
 Fields of Treatment 3 Potential Applied to Emitting Wires 45 KV

SINGLE STAGE TYPE:

Distance Between Emitting Wires and Collecting Plates 4.5 in.  
 Number of Isolatable Bus Sections 6 Corona Power \_\_\_\_\_ Watts/1000 cfm

TWO STAGE TYPE:

Distance Between First Stage Emitting Electrodes and Field Receiver Electrodes (Ground) \_\_\_\_\_ in  
 Potential Applied to Second Stage Emitting Plates \_\_\_\_\_ KV  
 Distance Between Second Stage Emitting Plates and Grounded Collection Plates \_\_\_\_\_ in

CYCLONES/MULTICYCLONES:

|   |   |                                |
|---|---|--------------------------------|
| Simple Cyclone                          | Multicyclone                            | SEE ATTACHMENT 2               |
| Diameter _____ in                       | Diameter                                | <u>unknown</u> in              |
| Inlet Dimensions _____                  | Inlet Dimensions of Individual Cyclone  | <u>unknown</u>                 |
| Outlet Dimensions _____                 | Outlet Dimensions of Individual Cyclone | <u>unknown</u>                 |
| Pressure Drop _____ in H <sub>2</sub> O | Pressure Drop                           | <u>2.5</u> in H <sub>2</sub> O |
| Number of Cyclones _____                | Number of Cyclones                      | <u>160</u>                     |

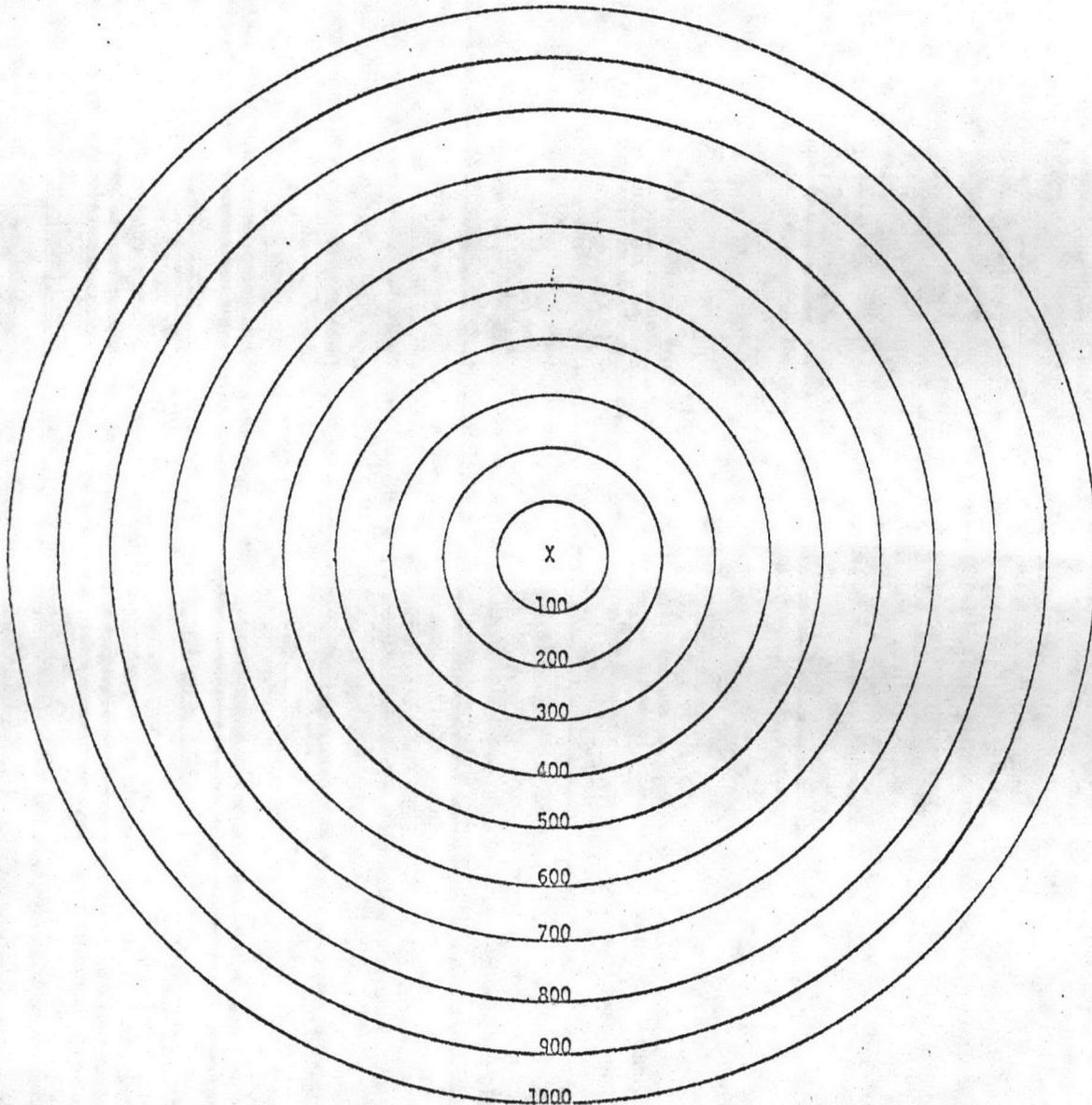
OTHER DRY COLLECTION DEVICES: GIVE COMPLETE DETAILED ENGINEERING DESCRIPTION AND DRAWINGS.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



VI. AREA DIAGRAM SEE ATTACHMENT 3



Owner Marine Corps Base, Camp Lejeune

Location Jacksonville, North Carolina  
(Give Street Address)

INSTRUCTIONS:

1. Show all surrounding buildings and roads within 1000 feet of subject equipment which is located at center of circles.
2. Indicate location and type of building by the use of small numbered circles with the description below.
3. Show roads as lines representing the road edges. Indicate street names and highway numbers.
4. Show wooded or cleared areas by approximate boundary lines and the words "woods", "cleared", "cornfield", etc.
5. Indicate direction of north by arrow.

CODE

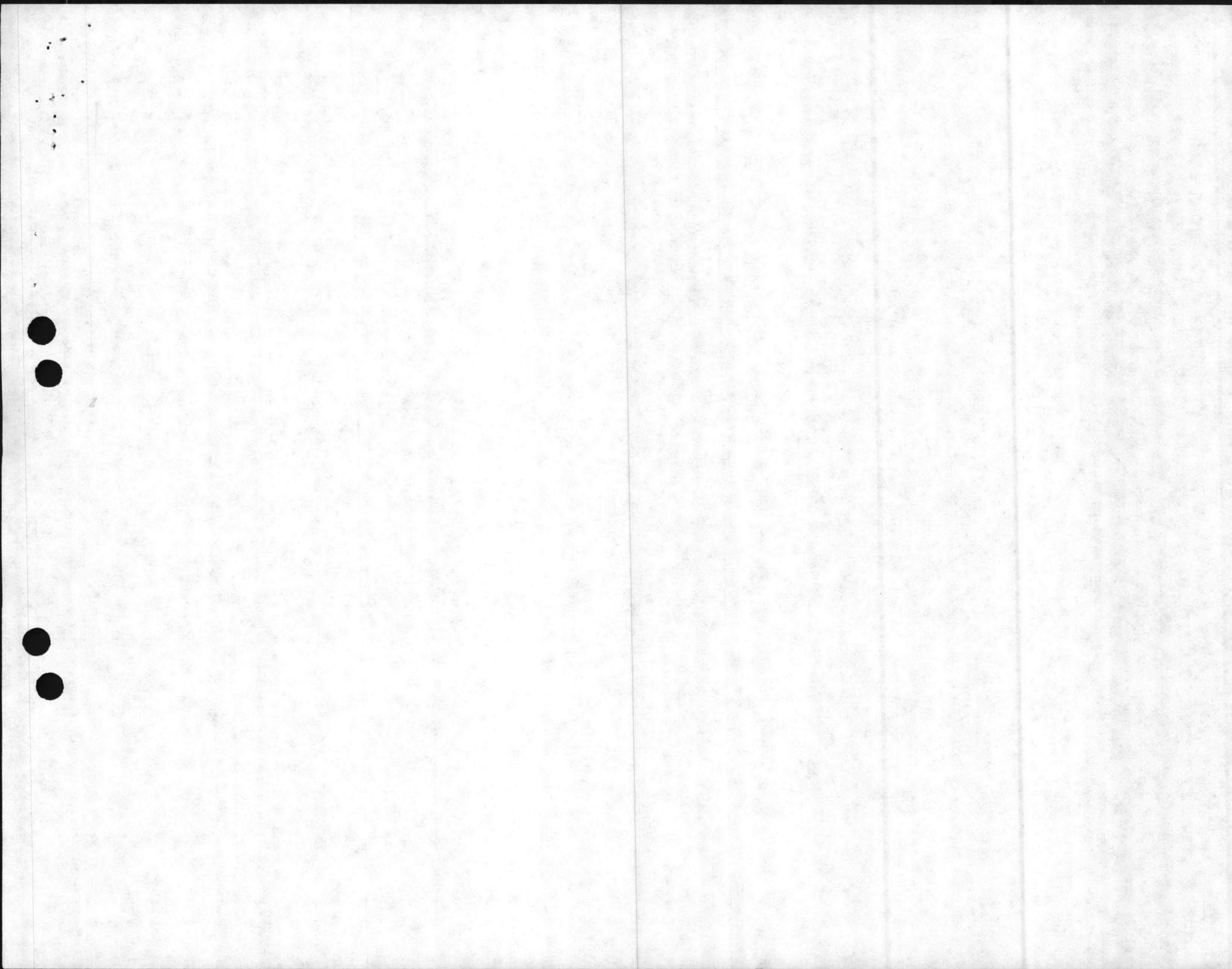
DESCRIPTION

- ①
- ②
- ③
- ④
- ⑤
- ⑥
- ⑦
- ⑧
- ⑨
- ⑩

EXAMPLE

- ① Church
- ② Residence

X Indicates location of equipment.





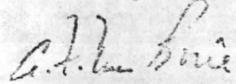


Page 2

Brigadier General F. W. Tief  
July 21, 1978

requesting public comment on the proposed Order, will be published in the Jacksonville Daily News in accordance with the Environmental Management Commission's Policy and Federal Regulations.

Sincerely yours,



A. F. McRorie, Director  
Division of Environmental Management

AFM/el

Enclosures

cc: Mr. James A. McColman  
Mr. David T. Ligon  
Mr. Wayne Cook  
Mr. Kirt Cox





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET  
ATLANTA, GEORGIA 30308

EXT 5003

JAN 13 1978

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Commanding General  
United States Marine Corps  
Marine Corps Base  
Camp Lejeune, North Carolina 28542

DEAR GEN. F.W. TIEF  
Dear Sir:

Based upon information requested from the Marine Corps Base, Camp Lejeune, North Carolina and submitted by the facility on December 21, 1976, you are hereby notified, pursuant to Section 113(a)(1) of the Clean Air Act, 42 U.S.C. §7413(a)(1), that the U. S. Environmental Protection Agency has found the following coal-fired boilers at your facility to be in violation of North Carolina Administrative Code, Title 15, Department of Natural and Economic Resources, Chapter 2, Environmental Management, Subchapter 2D, Air Pollution Control Requirements, Section .0500, Subsection .0503, control of particulates from fuel burning sources:

Central Heating Plant  
Building 1700

Boiler Nos. 1, 2, 3, and 4

Furthermore, based upon information requested and submitted by the North Carolina Department of Natural and Economic Resources, Division of Environmental Management and based on our field inspection of your facility on May 24, 1976, the U. S. Environmental Protection Agency has found the following coal-fired boilers at your facility to be in violation of North Carolina Administrative Code, Title 15, Department of Natural and Economic Resources, Chapter 2, Environmental Management, Subchapter 2D, Air Pollution Control Requirements, Section .0500, Subsection .0521, Control of Visible Emissions:

Central Heating Plant  
Building 1700

Boiler Nos. 2 and 3



The above-cited regulations are part of the Federally-approved implementation plan applicable to the air quality control region in which your facility is located. These regulations were officially adopted as part of the State Implementation Plan upon approval in the May 31, 1972, Federal Register, Volume 37, at page 10884.

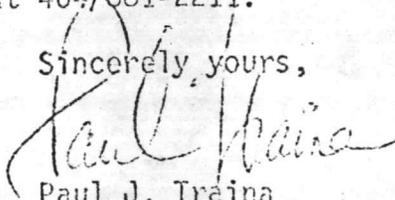
If the State of North Carolina initiates appropriate action within thirty (30) days after receipt of this Notice to ensure your compliance with the requirements of the North Carolina State Implementation Plan as expeditiously as practicable, either through the issuance of a Federally-approved Delayed Compliance Order or the commencement and successful completion of judicial action, no additional EPA involvement will be required provided expeditious compliance is, in fact, achieved.

However, should the State fail to take appropriate action, the EPA will take whatever administrative or judicial steps necessary to expeditiously bring your facility into full compliance with the applicable regulations. If your facility can achieve full compliance with the requirements of the State Implementation Plan as expeditiously as practicable but in no event later than July 1, 1979, the EPA Administrator may issue a Delayed Compliance Order to your facility pursuant to Section 113(d) of the Clean Air Act, 42 U.S.C. §7413(d). However, if the Administrator determines that judicial action would be more appropriate or that the facility cannot achieve final compliance by July 1, 1979, he shall refer the matter to the U. S. Attorney for the commencement of a civil action for injunctive relief and the assessment of civil penalties pursuant to Section 113(b) of the Act, 42 U.S.C. §7413(b) or a criminal prosecution pursuant to Section 113(c) of the Act, 42 U.S.C. §7413(c), or both.

In addition to the aforementioned sanctions, the failure of your facility to achieve final compliance with any applicable emission limitation, emission standard, or compliance schedule under the State Implementation Plan by July 1, 1979, shall result in the assessment and collection of a non-compliance penalty pursuant to Section 120 of the Act, 42 U.S.C. §7420.

If you have any questions relating to this Notice, please feel free to contact me or Mr. Arthur G. Linton, Federal Activities Coordinator, Enforcement Division, at 404/881-2211.

Sincerely yours,



Paul J. Traina  
Director  
Enforcement Division

cc: See Attachment



cc: North Carolina Department of Natural  
and Economic Resources

Commander of the Navy

Commandant of the Marine Corps

EPA/OFA

Mr. W. L. Wallace



WREA

---

Original.  
you keep.

WREA





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET  
ATLANTA, GEORGIA 30308

JAN 13 1978

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Commanding General  
United States Marine Corps  
Marine Corps Base  
Camp Lejeune, North Carolina 28542

Dear Sir:

Based upon information requested from the Marine Corps Base, Camp Lejeune, North Carolina and submitted by the facility on December 21, 1976, you are hereby notified, pursuant to Section 113(a)(1) of the Clean Air Act, 42 U.S.C. §7413(a)(1), that the U. S. Environmental Protection Agency has found the following coal-fired boilers at your facility to be in violation of North Carolina Administrative Code, Title 15, Department of Natural and Economic Resources, Chapter 2, Environmental Management, Subchapter 2D, Air Pollution Control Requirements, Section .0500, Subsection .0503, control of particulates from fuel burning sources:

Central Heating Plant  
Building 1700

Boiler Nos. 1, 2, 3, and 4

Furthermore, based upon information requested and submitted by the North Carolina Department of Natural and Economic Resources, Division of Environmental Management and based on our field inspection of your facility on May 24, 1976, the U. S. Environmental Protection Agency has found the following coal-fired boilers at your facility to be in violation of North Carolina Administrative Code, Title 15, Department of Natural and Economic Resources, Chapter 2, Environmental Management, Subchapter 2D, Air Pollution Control Requirements, Section .0500, Subsection .0521, Control of Visible Emissions:

Central Heating Plant  
Building 1700

Boiler Nos. 2 and 3

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Commanding General  
United States Marine Corps  
Marine Corps Base  
Camp Lejeune, North Carolina 28542

Dear Sir:

Based upon information requested from the Marine Corps Base, Camp Lejeune, North Carolina and furnished by the facility on December 21, 1978, you are hereby notified, pursuant to Section 105(a)(1) of the Clean Air Act, 42 U.S.C. 1851(a)(1), that the Environmental Protection Agency has found the following coal-fired boilers at your facility to be in violation of North Carolina Administrative Code, Title 15, Department of Natural and Economic Resources, Chapter 2, Environmental Management, Subchapter 2D, Air Pollution Control Requirements, Section 0200, Subsection 0203, Control of particulates from fuel burning sources:

Central Heating Plant  
Building 1700

Boiler Nos. 1, 2, 3, and 4

cc

Furthermore, based upon information requested and submitted by the North Carolina Department of Natural and Economic Resources, Division of Environmental Management and based on our field inspection of your facility on May 24, 1978, the U.S. Environmental Protection Agency has found the following coal-fired boilers at your facility to be in violation of North Carolina Administrative Code, Title 15, Department of Natural and Economic Resources, Chapter 2, Environmental Management, Subchapter 2D, Air Pollution Control Requirements, Section 0200, Subsection 0201, Control of Visible Emissions:

Central Heating Plant  
Building 1700

Boiler Nos. 1, 2, 3, and 4

The above-cited regulations are part of the Federally-approved implementation plan applicable to the air quality control region in which your facility is located. These regulations were officially adopted as part of the State Implementation Plan upon approval in the May 31, 1972, Federal Register, Volume 37, at page 10884.

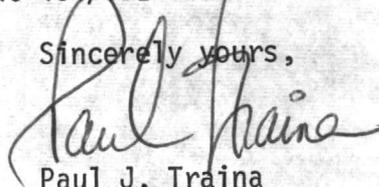
If the State of North Carolina initiates appropriate action within thirty (30) days after receipt of this Notice to ensure your compliance with the requirements of the North Carolina State Implementation Plan as expeditiously as practicable, either through the issuance of a Federally-approved Delayed Compliance Order or the commencement and successful completion of judicial action, no additional EPA involvement will be required provided expeditious compliance is, in fact, achieved.

However, should the State fail to take appropriate action, the EPA will take whatever administrative or judicial steps necessary to expeditiously bring your facility into full compliance with the applicable regulations. If your facility can achieve full compliance with the requirements of the State Implementation Plan as expeditiously as practicable but in no event later than July 1, 1979, the EPA Administrator may issue a Delayed Compliance Order to your facility pursuant to Section 113(d) of the Clean Air Act, 42 U.S.C. §7413(d). However, if the Administrator determines that judicial action would be more appropriate or that the facility cannot achieve final compliance by July 1, 1979, he shall refer the matter to the U. S. Attorney for the commencement of a civil action for injunctive relief and the assessment of civil penalties pursuant to Section 113(b) of the Act, 42 U.S.C. §7413(b) or a criminal prosecution pursuant to Section 113(c) of the Act, 42 U.S.C. §7413(c), or both.

In addition to the aforementioned sanctions, the failure of your facility to achieve final compliance with any applicable emission limitation, emission standard, or compliance schedule under the State Implementation Plan by July 1, 1979, shall result in the assessment and collection of a non-compliance penalty pursuant to Section 120 of the Act, 42 U.S.C. §7420.

If you have any questions relating to this Notice, please feel free to contact me or Mr. Arthur G. Linton, Federal Activities Coordinator, Enforcement Division, at 404/881-2211.

Sincerely yours,



Paul J. Traina  
Director  
Enforcement Division

cc: See Attachment

The above cited regulations are part of the Federal Implementation Plan applicable to the air quality control region in which your facility is located. These regulations were officially adopted as part of the State Implementation Plan approval in the May 31, 1972, Federal Register, Volume 37, page 10834.

If the State of North Carolina wishes to approve the regulations within thirty (30) days after receipt of this notice to assure your compliance with the requirements of the State of North Carolina, the Implementation Plan as expeditiously as practicable. Further, the issuance of a Federal approval delayed under the Order by the commencement and successful completion of judicial action, in addition EPA involvement will be required upon the expiration of the time in fact, achieved.

However, should you fail to take appropriate action, the EPA will take whatever action it deems necessary to bring your facility into compliance with the applicable regulations. If your facility can achieve full compliance with the requirements of the State Implementation Plan as expeditiously as practicable but in an event later than July 1, 1972, the EPA Administrator may issue a delayed compliance order to your facility pursuant to Section 113(d) of the Clean Air Act, 42 U.S.C. 8413(d). However, if the Administrator determines that judicial action would be more appropriate or that the facility cannot achieve final compliance by July 1, 1972, he shall refer the matter to the U.S. Attorney for the commencement of a civil action for injunctive relief and the assessment of civil penalties pursuant to Section 113(d) of the Act, 42 U.S.C. 8413(d) or a criminal prosecution pursuant to Section 113(c) of the Act, 42 U.S.C. 8413(c), or both.

In addition to the aforementioned sanctions, the failure of your facility to achieve final compliance with any applicable emission limitation, emission standard or control schedule under the State Implementation Plan by July 1, 1972, shall result in the assessment and collection of a non-compliance penalty pursuant to Section 120 of the Act, 42 U.S.C. 8412.

If you have any questions relating to this notice, please feel free to contact me or Mr. Arthur G. Linton, Federal Activities Coordinator, Enforcement Division, at 404-881-2211.

Sincerely yours,

Paul S. Fyline  
Director  
Enforcement Division

-3-

cc: North Carolina Department of Natural  
and Economic Resources

Commander of the Navy

Commandant of the Marine Corps

EPA/OFA

Mr. W. L. Wallace

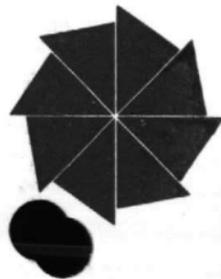
cc: North Carolina Department of Natural  
and Economic Resources

Commander of the Navy

Commandant of the Marine Corps

ERAP/OPA

Mr. W. L. Wallace



North Carolina Department of Natural  
Resources & Community Development  
P. O. Box 27687 Raleigh, N. C. 27611-7687

PRESORTED  
FIRST CLASS



Colonel K. P. Millice, Jr.  
United States Marine Corps  
Marine Corps Base  
MAIN/FEC/rn  
Camp Lejeune, NC 28542

