

DIATOMACEOUS EARTH OR DICALITE = 9390-282-4161 ^{G.I.#}

(CELITE) = JONNS-MANVILLE BRAND

MECHANICAL SPECIFICATIONS

FOR

SWIMMING POOL

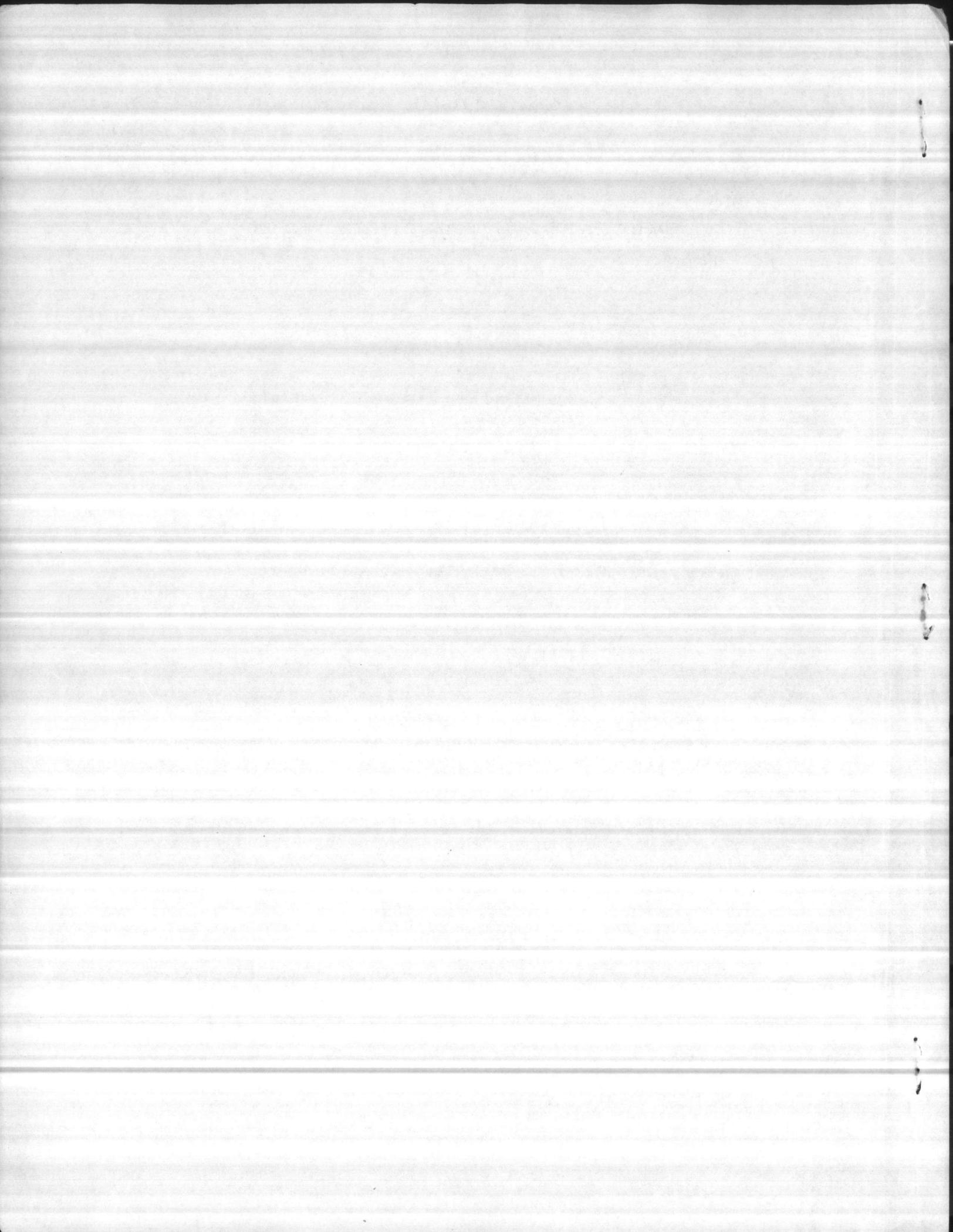
FOR

MARINE CORP AIR FACILITY

NEW RIVER, NORTH CAROLINA

JUNE 27, 1963

NATIONAL POOL ENGINEERS, INC.
FLORENCE, ALABAMA



SECTION 1

RECIRCULATION AND PURIFICATION EQUIPMENT

JET CLEAN PRESSURE DIATOMACEOUS EARTH FILTER

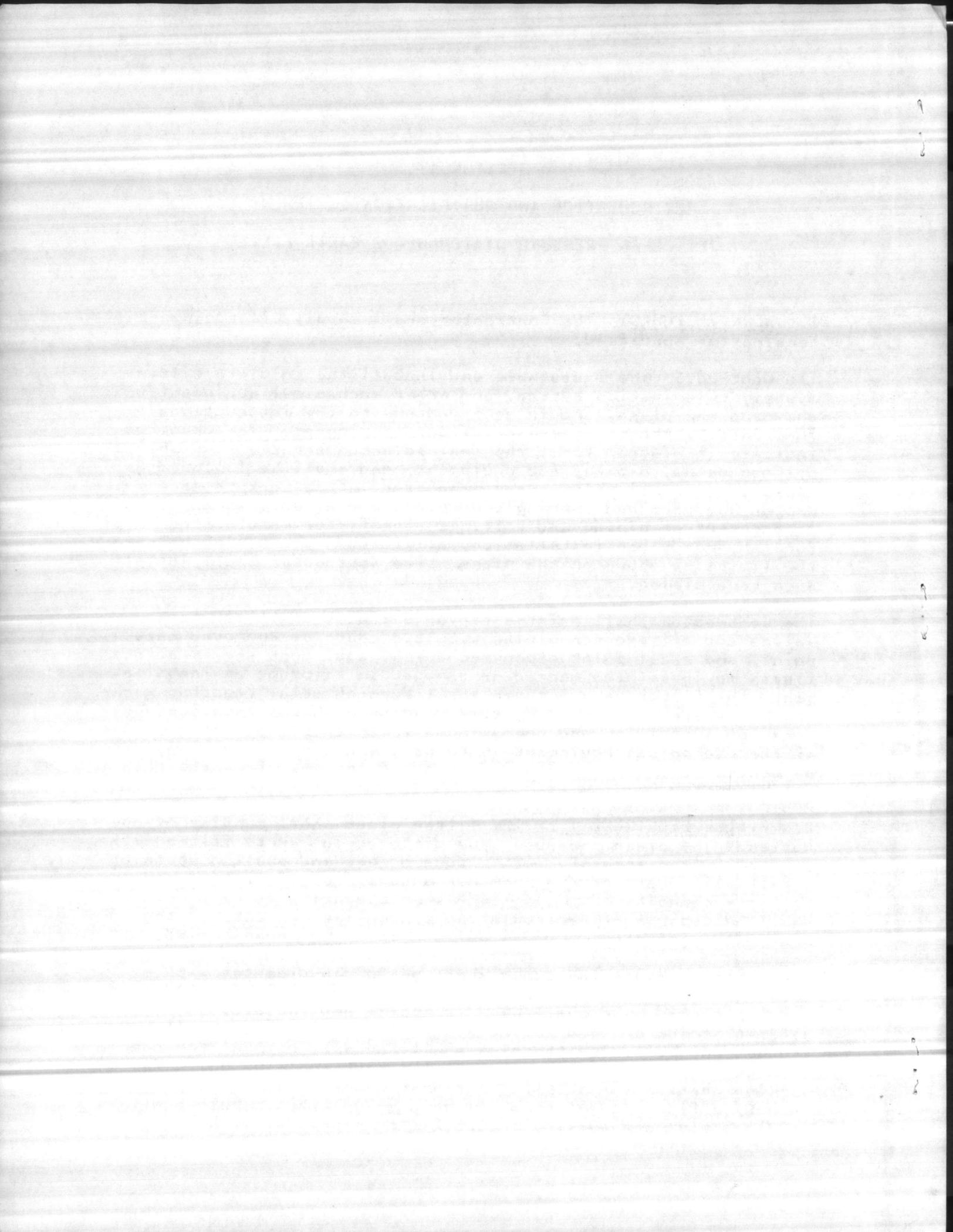
1. WORK INCLUDED: The Contractor shall supply all equipment as hereinafter specified.

The Contractor shall assemble and install the complete filter system, chlorination system, and other mechanical equipment as shown on the plans, and in accordance with the instructions furnished by the manufacturer of such equipment. The drawings indicate in diagram form, the desired arrangement of the principal apparatus, piping, and equipment, and shall be followed as closely as practicable, exercising care in the work to secure proper headroom and spacing conditions and a neat, workmanlike arrangement of piping and valving. The filter manufacturer shall furnish, ready for installation, all filter face piping between the limits as shown on the plans. The Contractor shall install such face piping.

The Contractor shall paint exterior surfaces of filter tanks, valves and all exposed piping with two coats of approved metal paint, and shall paint other mechanical equipment whose factory finish may have been marred or damaged in shipment or installation. The filter manufacturer shall furnish metal tags for marking all valves furnished by same, and furnish complete instructions for installing and operating all mechanical equipment. All of the mechanical equipment is to be guaranteed in writing, except as otherwise specified, for a period of one year from the date of shipment.

2. FILTER REQUIREMENTS: The filter plant shall consist of one National jet clean pressure type diatomaceous earth filter with a total filter area of 95 square feet and shall operate at a filtration rate of 2.5 GPM per square foot of filter area, having a capacity of 237.5 GPM when operating at this rate and shall be capable of recirculating the entire contents of the pool approximately 110,000 gallons in a 8 hour period.

3. FILTER TANKS: The tanks shall be 36" in diameter with a side shell of 25½" in length; the hat head shall be 5/16" thick and the dished head shall be 3/16" thick and the side shell shall be 3/16" thick of cold rolled steel plate. The head shall be flanged and bolted to the side shell for easy removal for complete inspection of the filter septum. The tank shall be built for a working pressure of 50 psi. Influent coupling shall be 4" inches, effluent coupling shall be 5" inches. Both shall be welded inside and outside of the filter tank.



\$643.50.

250 Piping

36" DIA x 42 1/2

JIM MCEWEN

4. FILTER ELEMENTS: The filter system shall contain 10 fiber-glass disc type elements 31" in diameter and covered with one layer of dacron cloth. The elements shall be mounted on a pivot whereby they may be turned by a crank, located outside the tank, at a fast rate. This in turn will clear the elements for a new filter cycle.

There shall be included a mineral deposit jet spray system located between each element which when in operation rotates from outside of shell to the center of the tank, spraying water at a high velocity against sides of filter elements.

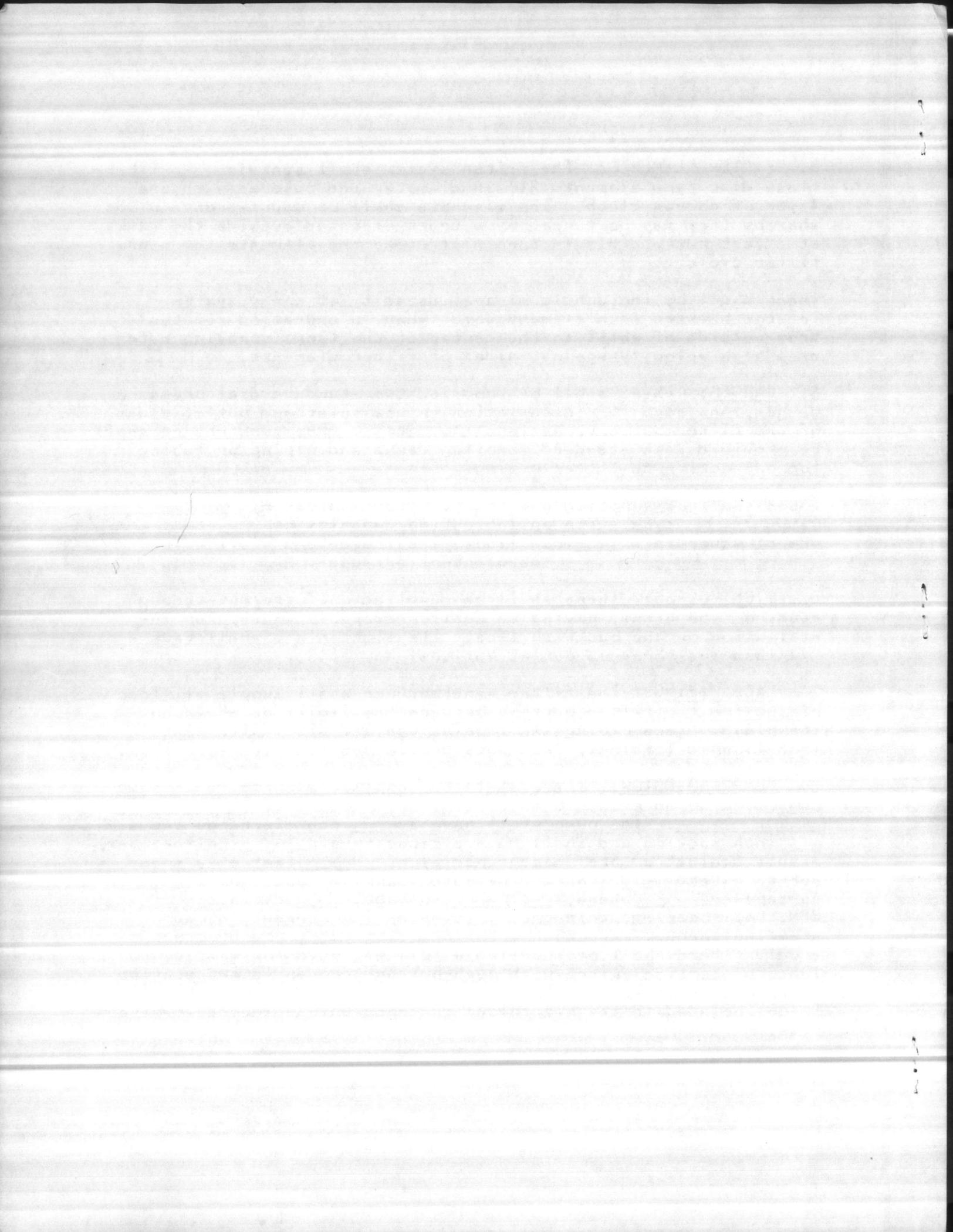
5. GAUGES: There shall be supplied two standard dial pressure gauges, one each for installation on the inlet and outlet sides of the filter battery, National No. 56452. Pressure gauges shall be provided with standard sampling cocks and piping or tubing for connection to filter piping.

There shall be supplied one rate of flow indicator, Mercury Manometer type, with an indicating capacity of 0 to 350 GPM of water in a 4 inch line. The indicators shall be of Meriam manufacture or equal.

6. SIGHT GLASS: There shall be supplied one straight-through reading type glass, having an easily removable glass, for installation on the backwash line. The sight glass shall have a 3/4 inch ips threaded outlet National No. 56435.

7. FACE PIPING: The filter manufacturer shall supply all face piping for the filter battery between the limits as shown on the plans. Face piping shall be galvanized steel with cast iron flanged fittings, iron body bronze mounted flanged valves.

8. PUMP AND MOTOR: There shall be supplied a centrifugal pump connected to an electric motor similar or equal to Carver 3H. The pump shall have a 3 inch discharge and a 4 inch suction and shall have a capacity of 238 gallons per minute against a total head capacity of 80 feet at a speed not to exceed 1750 RPM. The motor supplied shall be a 7 1/2 horsepower, 3 phase, 220/440 voltage, 60 cycle, 1750 RPM, ball-bearing, drip-proof, low-starting current, normal starting torque, induction motor of Carver manufacture or equal. There shall be supplied a full magnetic low voltage release protection switch with push-button stop-and-start station of General Electric manufacture or equal. Such protection switch to be included in the electrical contract unless indicated otherwise.

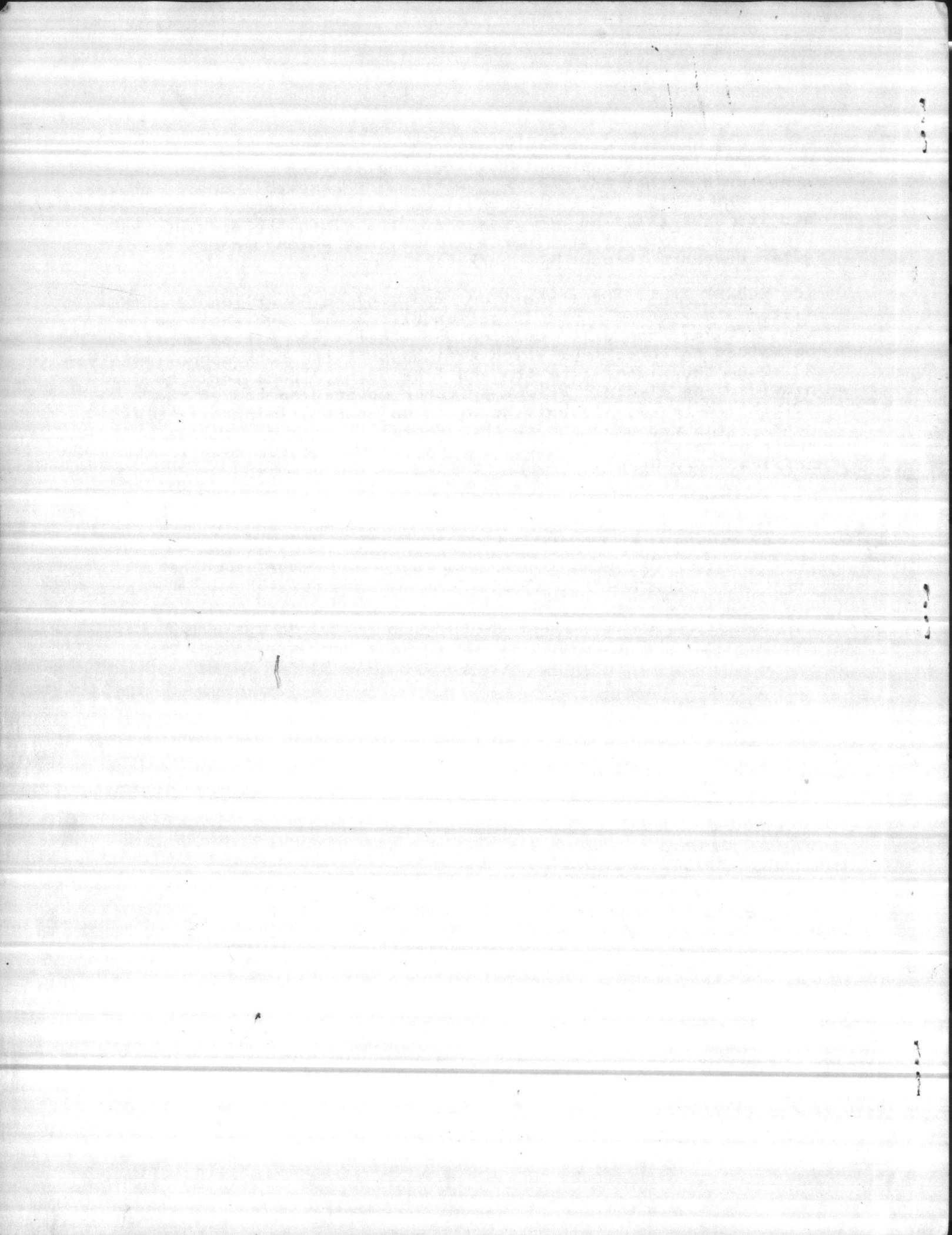


9. PUMP STRAINER: There shall be supplied one 5 inch pump strainer National No, 53725 with quick-removable cover, gasket, yoke, and bolt. The basket shall be perforated epoxy coated steel and its area shall be not less than five times the area of the pipe size. Type of strainer shall be that which directs the water downward through the basket. There shall be supplied one extra strainer basket.

10. SLURRY TANK: There shall be supplied one 100 gallon tank for filter aid storage. The 100 gallon filter aid tank shall be manufactured from 3/16" cold rolled steel. The bottom shall be welded to three legs which will support the tank approximately 3" above the floor. The top shall be open. There shall be provided one electric driven agitator mounted on top of the filter aid tank. It shall be sized so as to eliminate settlement of the diatomaceous earth. Proper lines and fittings shall be provided from each tank to its particular head in the chemical feed pump.

11. CHEMICAL FEEDER: There shall be supplied one double head chemical feeder. One head for feeding slurry with a capacity of 0 to 69 gallons per 24 hours. The other head shall feed soda ash with a capacity of 0 to 86 gallons per 24 hours. Feeder shall be Mec-O-Matic or equal.

12. SOLUTION TANK: There shall be supplied one 55 gallon fiberglass solution tank.



5. Date

Jun 23 71
mo day yr

(Office use only)

6. Check type of application:

a. Original

b. Revision

7. Number of original application

8. Name of facility where discharge or construction will occur.

5th Area Swimming Pool {Bldg. 540}

9. Full mailing address of facility named in item 8 above.

Marine Corps Base
Camp Lejeune, N.C. 28542

10. Names and mailing addresses of all adjoining property owners whose property also adjoins the waterway.

11. Check to indicate the nature of the proposed activity:

a. Dredging

b. Construction

c. Construction with Discharge

b. Discharge only

12. If activity is temporary in nature, estimate its duration in months.

If application is for a discharge:

13. List intake sources

Source	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal or private water supply system	0.1
Surface water body	
Ground water	
Other	

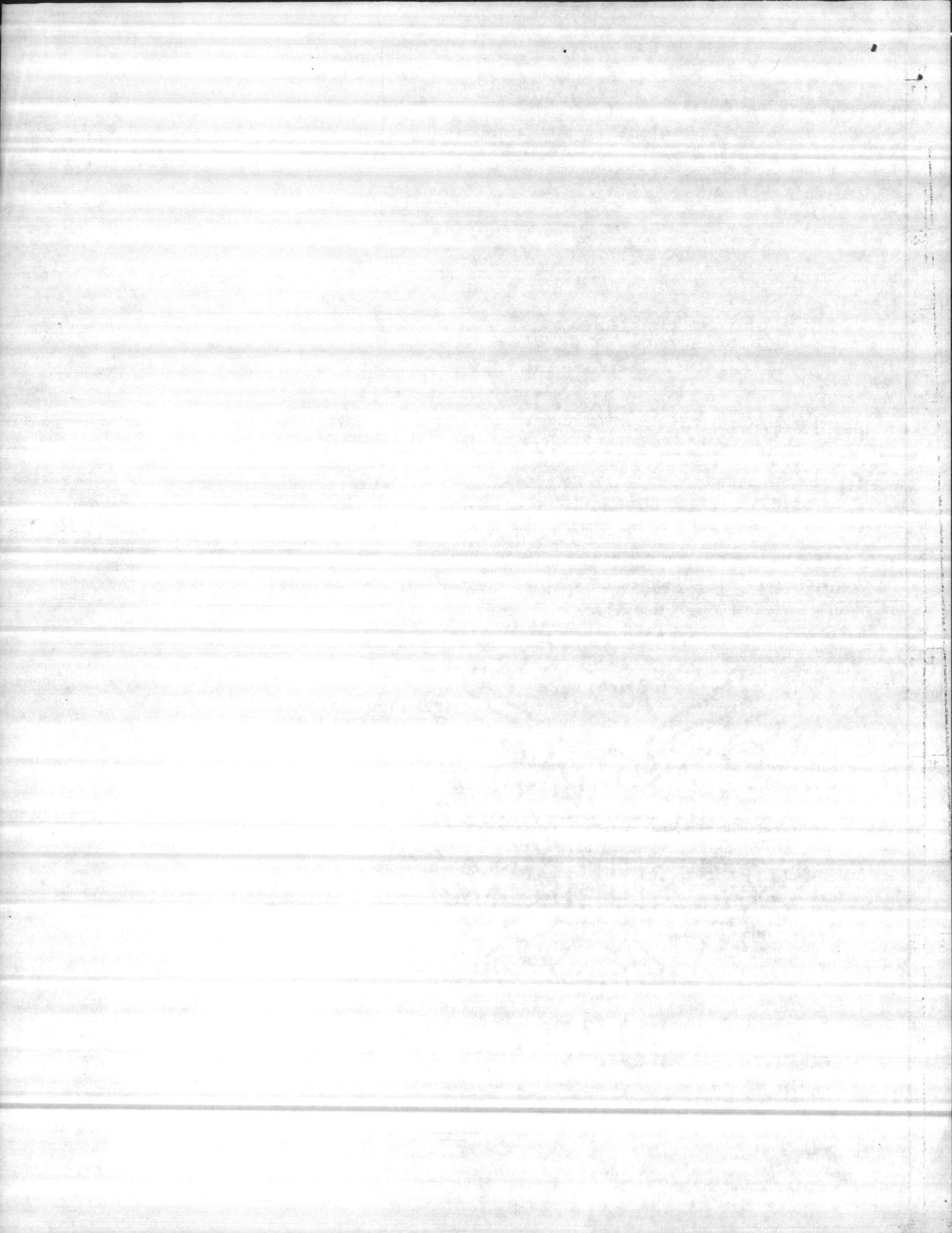
14. Describe water usage within the plant

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Cooling water	
Boiler Feed water	
Process water	
Sanitary system*	
Other	

15. List volume of discharges or losses other than into navigable waters.

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal waste treatment system	
Surface containment	
Underground disposal	
Waste Acceptance firms	
Evaporation	
Consumption	

* Indicate number employees served per day



SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is a. Present <input checked="" type="checkbox"/> b. Proposed new or changed <input type="checkbox"/>	2. Implementation schedule <input type="checkbox"/>	(Office use only)
---	---	-------------------

Name of corporate boundaries within which the point of discharge is located.			6. Discharge Serial No.
State	County	City or Town	
3. <u>North Carolina</u>	4. <u>Onslow</u>	5. <u>Camp Lejeune</u>	

State the precise location of the point of discharge. 7. Latitude <u>34</u> Degrees; <u>39</u> Min; <u>20</u> Sec. 8. Longitude <u>77</u> Degrees; <u>20</u> Min; <u>50</u> Sec.	9. Name of waterway at the point of discharge. <u>Branch tributary to New River</u>
--	--

10. Has application for water quality certification or description of impact been made? If so, give date:		
Date	Check if certificate is attached to form <input type="checkbox"/>	Name Issuing Agency
___ mo ___ day ___ yr	No	

11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process).

This activity is a swimming pool which is utilized for military training and recreation. The treatment process consists of adjusting the PH of the potable water make-up to prevent skin irritation. Waste from the process consists of filter backwash as required to provide swimming water which is sanitarly acceptable.

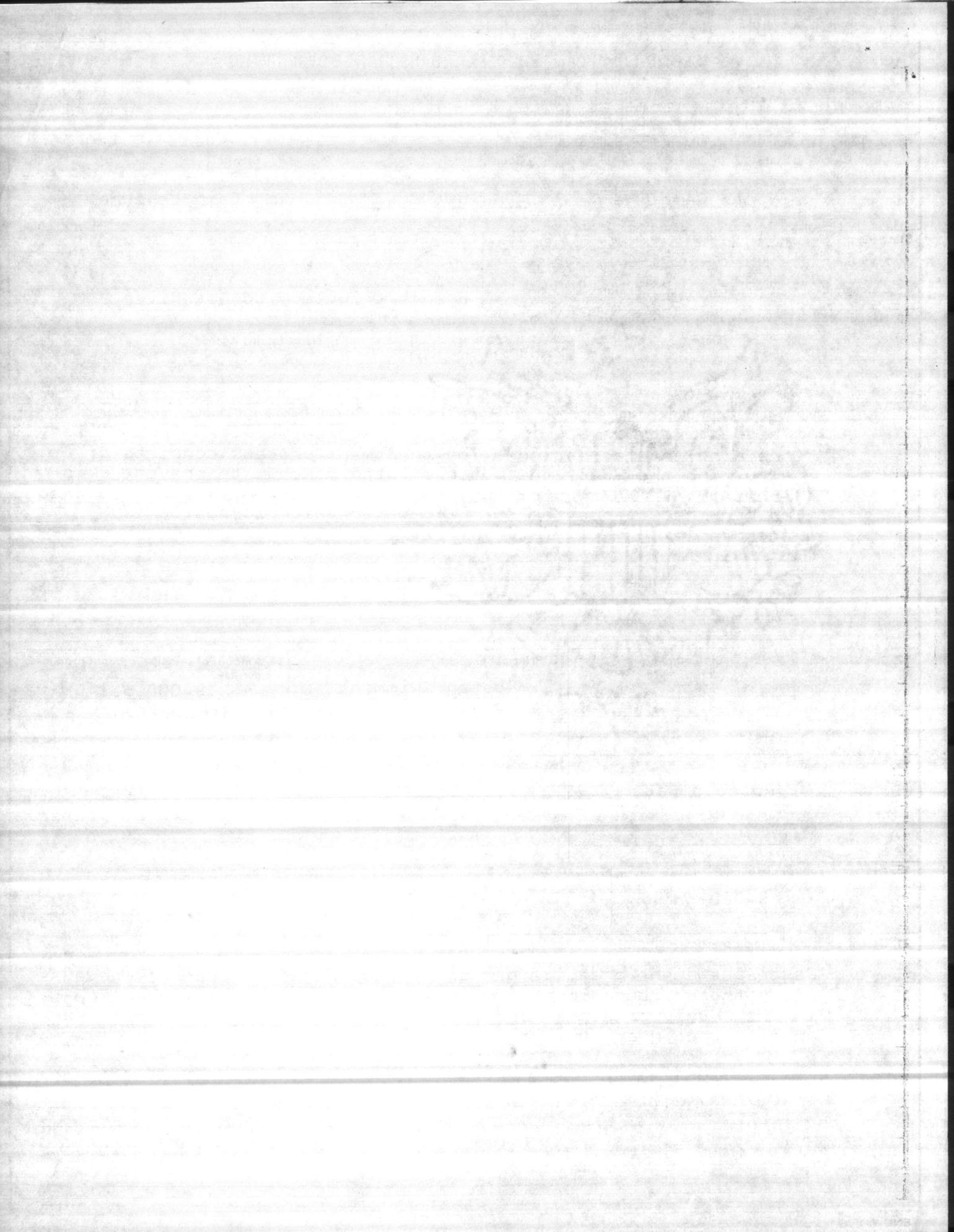
12. Standard industrial classification number.	13. Principal product.	14. Amount of principal product produced per day.
	<u>Water-Swimming Pool {Make-up water}</u>	<u>4,000 gal. {Make-up}</u>

15. Principal raw material.	16. Amount of principal raw material consumed per day.	17. Number of batch discharges per day.
<u>Potable water</u>		<u>1 -{Backwash Filter}</u>

18. Average gallons per batch discharge.	19. Date discharge began.	20. Date discharge will begin.
<u>4,000 gal.</u>	___ mo ___ day <u>4 5</u> yr	___ mo ___ day ___ yr

21. Describe waste abatement practices.

Waste abatement practice per se is considered unnecessary because the pathogen count in the waste is probably less than ever found in the receiving stream and the thermal quality of the waste is ambient upon reaching the receiving stream.

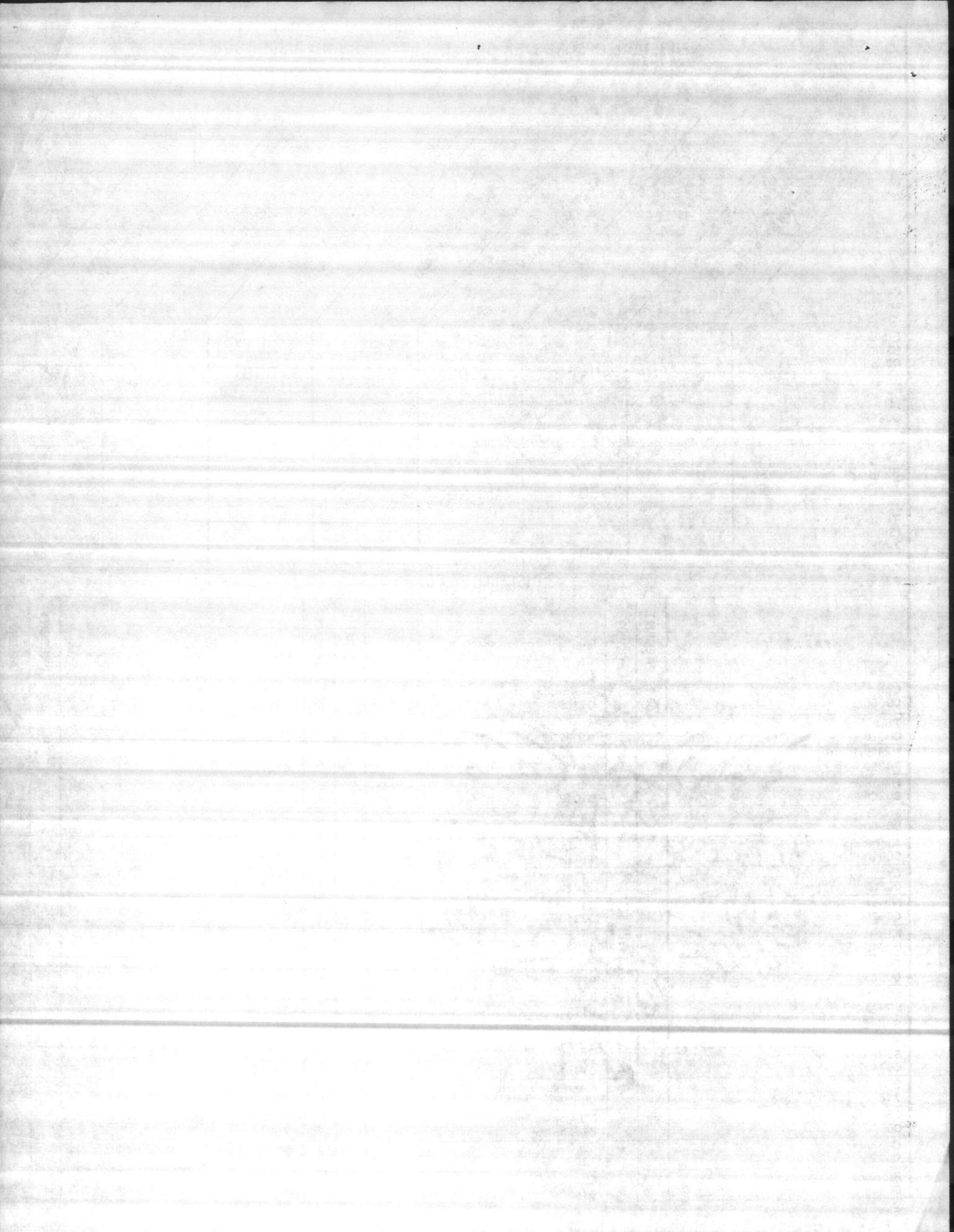


PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Intake	Discharge					(Office use only)	
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
Parameter and (Code)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Flow (Gallons per day) 00056		4,000	4,000	4,000	4,000	DYLY	ABS
pH 00400		7.6	7.7	7.7	7.7	"	
Temperature (Winter) (°F) 74028		80	Ambient	Ambient	Ambient		
Temperature (Summer) (°F) 74027		80	"	"	"		

DISCHARGE CONTENTS

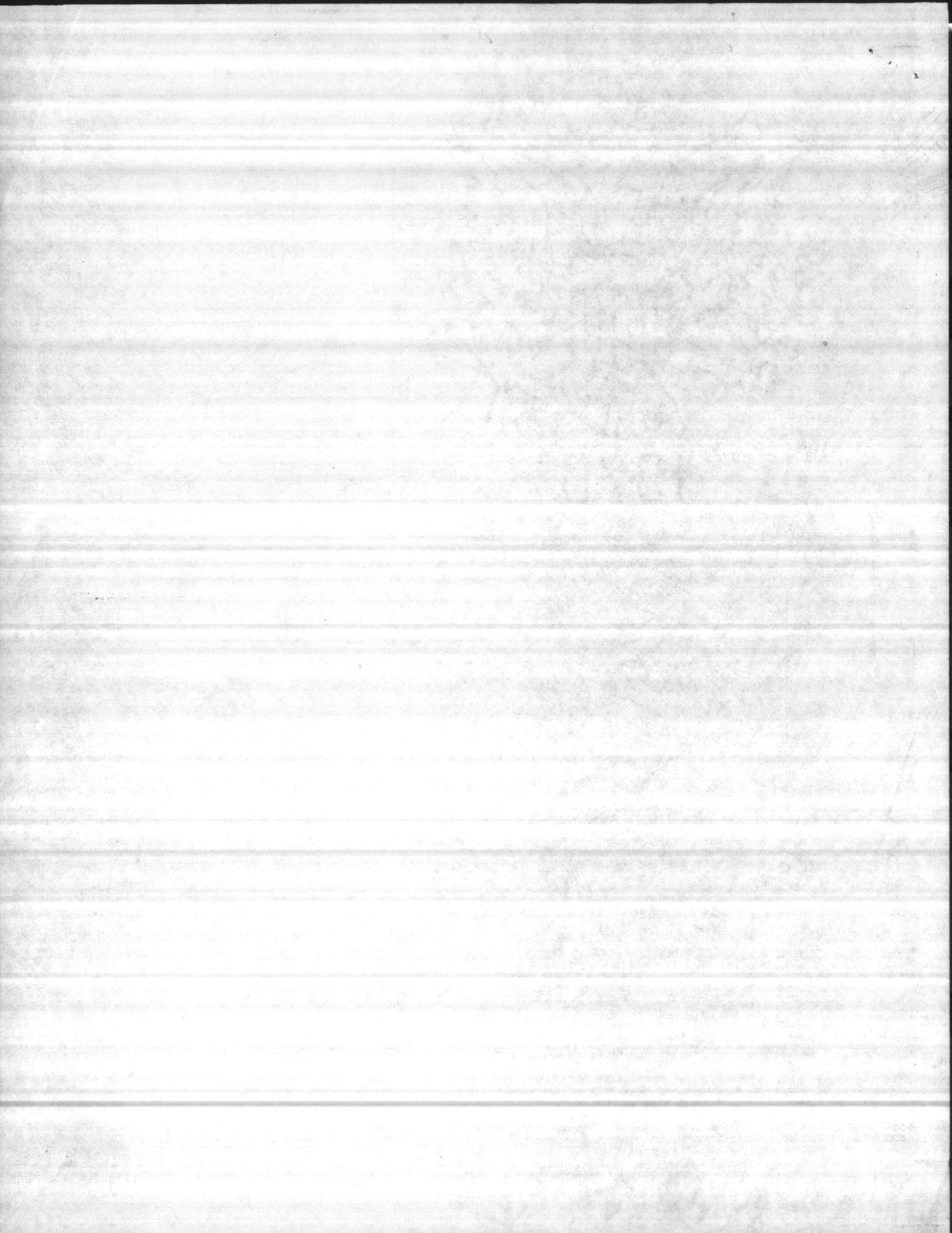
PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Turbidity 00070	X		Antimony 01097		X	Selenium 01147		X
Radioactivity 74050		X	Arsenic 01002		X	Silver 01077		X
Hardness 00900	X		Beryllium 01012		X	Potassium 00937		X
Solids 00500	X		Barium 01007		X	Sodium 00929	X	
Ammonia 00510		X	Boron 01022		X	Titanium 01152		X
Organic Nitrogen 00605		X	Cadmium 01027		X	Tin 01102		X
Nitrate 00620		X	Calcium 00916	X		Zinc 01092		X
Nitrite 00615		X	Cobalt 01037		X	Algicides 74051		X
Phosphorus 00665		X	Chromium 01034		X	Oil and Grease 00550		X
Sulfate 00945		X	Copper 01042		X	Phenols 32730		X
Sulfide 00745		X	Iron 01045	X		Surfactants 38260		X
Sulfite 00740		X	Lead 01051		X	Chlorinated Hydrocarbons 74052		X
Bromide 71870		X	Magnesium 00927		X	Pesticides 74053		X
Chloride 00940	X		Manganese 01055		X	Fecal Streptococci Bacteria 74054		X
Cyanide 00720		X	Mercury 71900		X	Coliform Bacteria 74056		X
Fluoride 00951	X		Molybdenum 01062		X			





FROM AMS SERIES V742
SHEET 5553 111

SWIMMING POOL WASTE DISCHARGE
in Branch tributary to New River
at Camp Lejeune - Hadnot Point Area (Bldg. 540)
County of Onslow, State North Carolina
Application by Commanding General
Sheet 1 of 1 23 June 1971 Date



5. Date

Jun 23 71
mo day yr

(Office use only)

6. Check type of application:

a. Original

b. Revision

7. Number of original application

8. Name of facility where discharge or construction will occur.

Montford Point Swimming Pool [Bldg. 139]

9. Full mailing address of facility named in item 8 above.

Marine Corps Base
Camp Lejeune, N. C. 28542

10. Names and mailing addresses of all adjoining property owners whose property also adjoins the waterway.

11. Check to indicate the nature of the proposed activity:

a. Dredging

b. Construction

e. Construction with Discharge

b. Discharge only

12. If activity is temporary in nature, estimate its duration in months.

If application is for a discharge:

13. List intake sources

Source	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal or private water supply system	0.1
Surface water body	
Ground water	
Other	

14. Describe water usage within the plant

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Cooling water	
Boiler Feed water	
Process water	
Sanitary system*	
Other	

15. List volume of discharges or losses other than into navigable waters.

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal waste treatment system	
Surface containment	
Underground disposal	
Waste Acceptance firms	
Evaporation	
Consumption	

* Indicate number employees served per day

SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is a. Present <input type="checkbox"/> b. Proposed new or changed <input type="checkbox"/>	2. Implementation schedule <input type="checkbox"/>	(Office use only)
--	---	-------------------

Name of corporate boundaries within which the point of discharge is located. State <u>3. North Carolina</u> County <u>4. Onslow</u> City or Town <u>5. Camp Lejeune</u>	6. Discharge Serial No.
--	-------------------------

State the precise location of the point of discharge. 7. Latitude <u>3 4</u> Degrees; <u>4 3</u> Min; <u>5 0</u> Sec. 8. Longitude <u>7 7</u> Degrees; <u>2 4</u> Min; <u>2 0</u> Sec.	9. Name of waterway at the point of discharge. <u>Ditch tributary to Scales Creek</u>
--	--

10. Has application for water quality certification or description of impact been made? If so, give date:		
Date ___ mo ___ day ___ yr	Check if certificate is attached to form <input type="checkbox"/>	Name Issuing Agency _____
No		

11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process).

This activity is a swimming pool which is utilized for military training and recreation. The treatment process consists of adjusting the PH of the potable water make-up to prevent skin irritation. Waste from the process consists of filter backwash as required to provide swimming water which is sanitarly acceptable.

12. Standard industrial classification number. _____	13. Principal product. <u>Water swimming pool -Make-up water</u>	14. Amount of principal product produced per day. <u>4,000 gals. Make-up</u>
---	---	---

15. Principal raw material. <u>Potable Water</u>	16. Amount of principal raw material consumed per day. _____	17. Number of batch discharges per day. <u>1 {Backwash filter}</u>
---	---	---

18. Average gallons per batch discharge. <u>4,000 gals.</u>	19. Date discharge began. ___ mo ___ day <u>4 5</u> yr	20. Date discharge will begin. ___ mo ___ day ___ yr
--	---	---

21. Describe waste abatement practices.

Waste abatement practice per se is considered unnecessary because the pathogen count in the waste is probably less than ever found in the receiving stream and the thermal quality of the waste is ambient upon reaching the receiving stream.

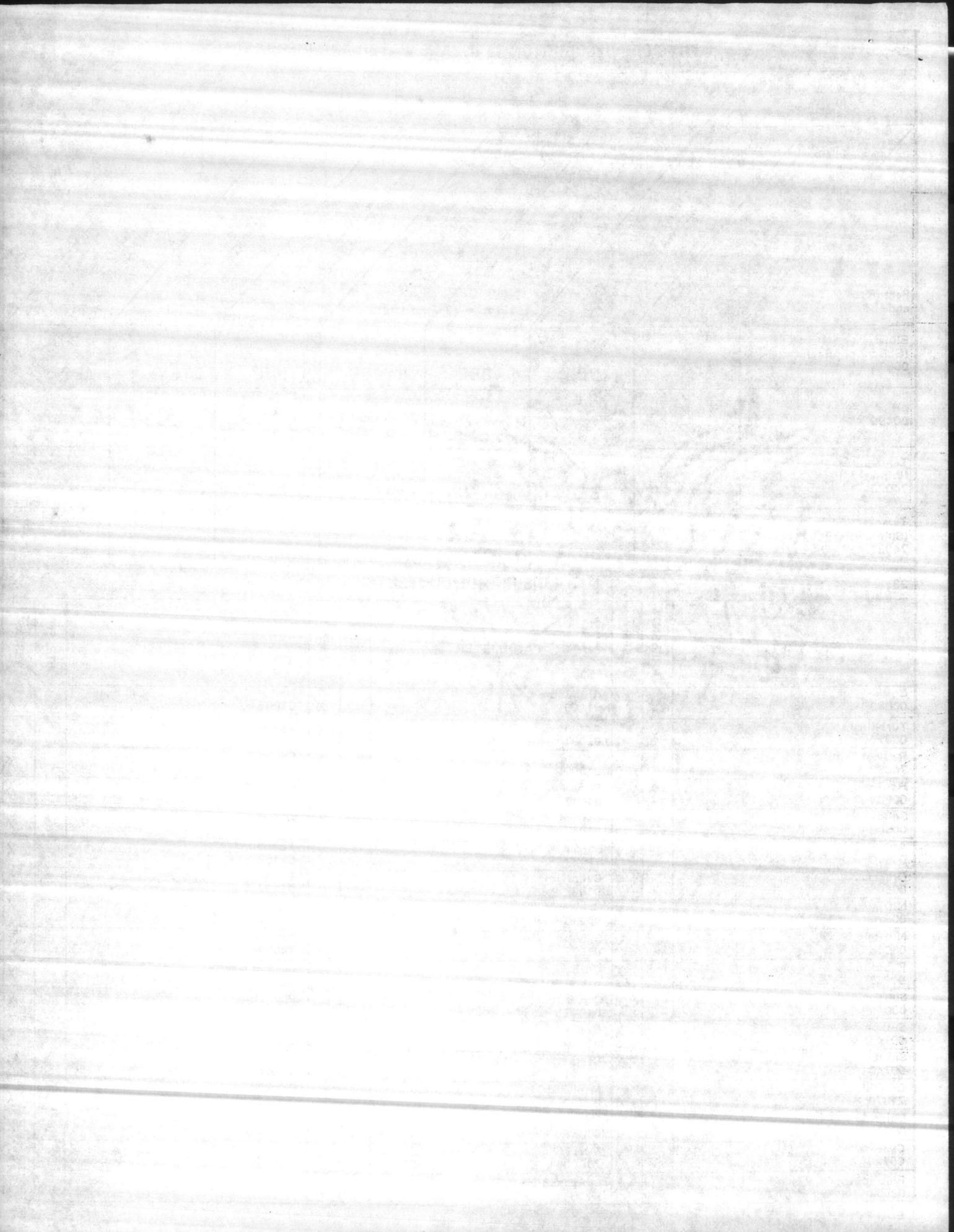
THE UNIVERSITY OF CHICAGO LIBRARY

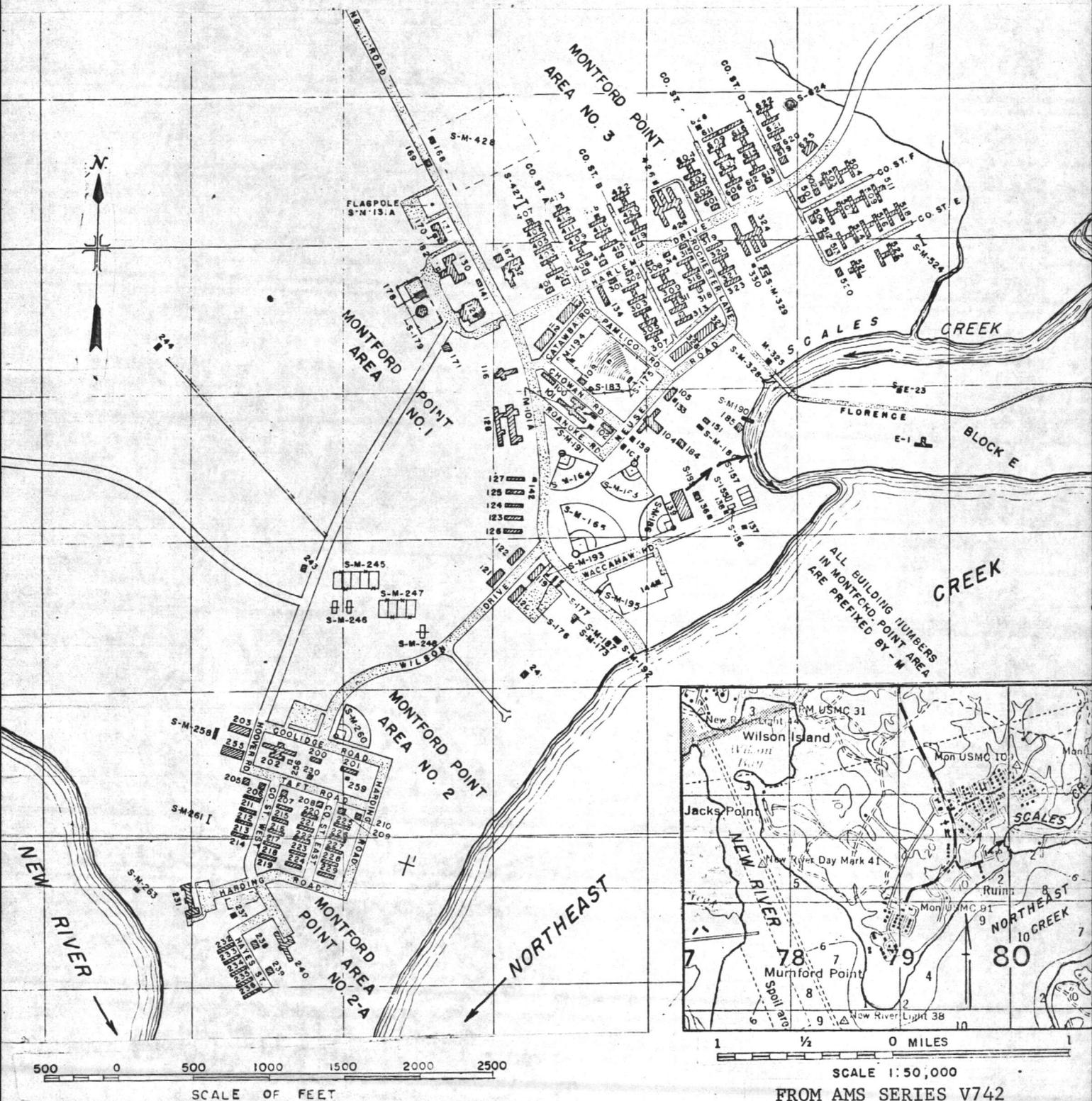
PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Intake	Discharge						(Office use only)
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
Parameter and (Code)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Flow (Gallons per day) 00056		4,000	4,000	4,000	4,000	DYLY	ABS
pH 00400		7.6	7.7	7.7	7.7	"	
Temperature (Winter) (°F) 74028		80	AMBIENT	AMBIENT	AMBIENT		
Temperature (Summer) (°F) 74027		80	"	"	"		

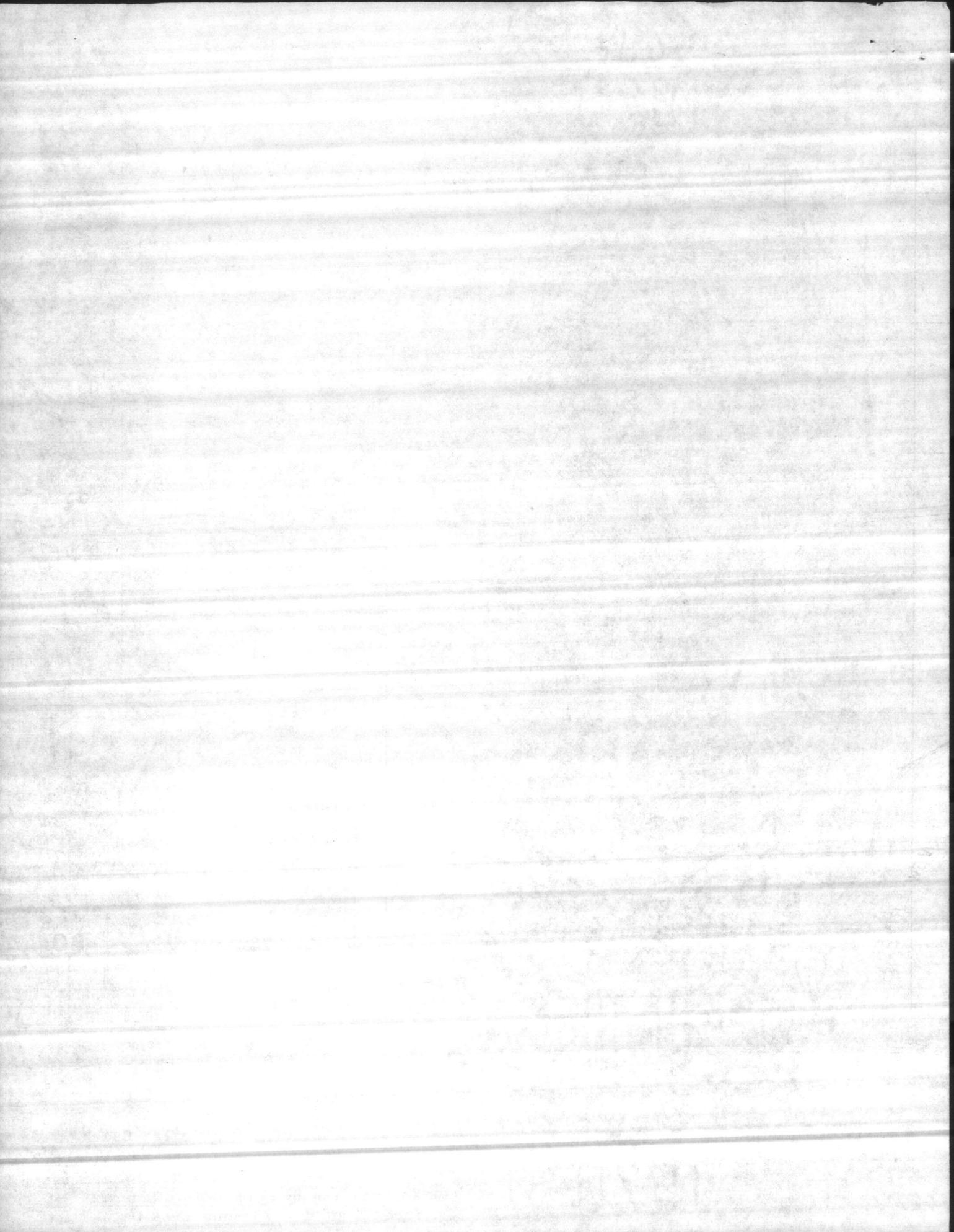
DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Color 00080	X		Aluminum 01105		X	Nickel 01067		X
Turbidity 00070	X		Antimony 01097		X	Selenium 01147		X
Radioactivity 74050		X	Arsenic 01002		X	Silver 01077		X
Hardness 00900	X		Beryllium 01012		X	Potassium 00937		X
Solids 00500	X		Barium 01007		X	Sodium 00929	X	X
Ammonia 00610		X	Boron 01022		X	Titanium 01152		X
Organic Nitrogen 00605		X	Cadmium 01027		X	Tin 01102		X
Nitrate 00620		X	Calcium 00916	X		Zinc 01092		X
Nitrite 00615		X	Cobalt 01037		X	Algicides 74051		X
Phosphorus 00665		X	Chromium 01034		X	Oil and Grease 00550		X
Sulfate 00945		X	Copper 01042		X	Phenols 32730		X
Sulfide 00745		X	Iron 01045	X		Surfactants 38260		X
Sulfite 00740		X	Lead 01051		X	Chlorinated Hydrocarbons 74052		X
Bromide 71870		X	Magnesium 00927		X	Pesticides 74053		X
Chloride 00940	X		Manganese 01055		X	Fecal Streptococci Bacteria 74054		X
Cyanide 00720		X	Mercury 71900		X	Coliform Bacteria 74055		X
Fluoride 00951		X	Molybdenum 01062		X			





SWIMMING POOL WASTE DISCHARGE
 in Ditch tributary to Scales Creek
 at Camp Lejeune - Montford Point Area
 County of Onslow, State North Carolina
 Application by Commanding General
 Sheet 1 of 1 23 June 1971 Date



5. Date

J u n 2 3 7 1
mo day yr

(Office use only)

6. Check type of application:

a. Original

b. Revision

7. Number of original application

8. Name of facility where discharge or construction will occur.

Swimming Pool {Paradise Point, Bldg. 2615}

9. Full mailing address of facility named in item 8 above.

Marine Corps Base
Camp Lejeune, N.C. 28542

10. Names and mailing addresses of all adjoining property owners whose property also adjoins the waterway.

11. Check to indicate the nature of the proposed activity:

a. Dredging

b. Construction

c. Construction with Discharge

b. Discharge only

12. If activity is temporary in nature, estimate its duration in months.

If application is for a discharge:

13. List intake sources

Source	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal or private water supply system	0 1
Surface water body	
Ground water	
Other	

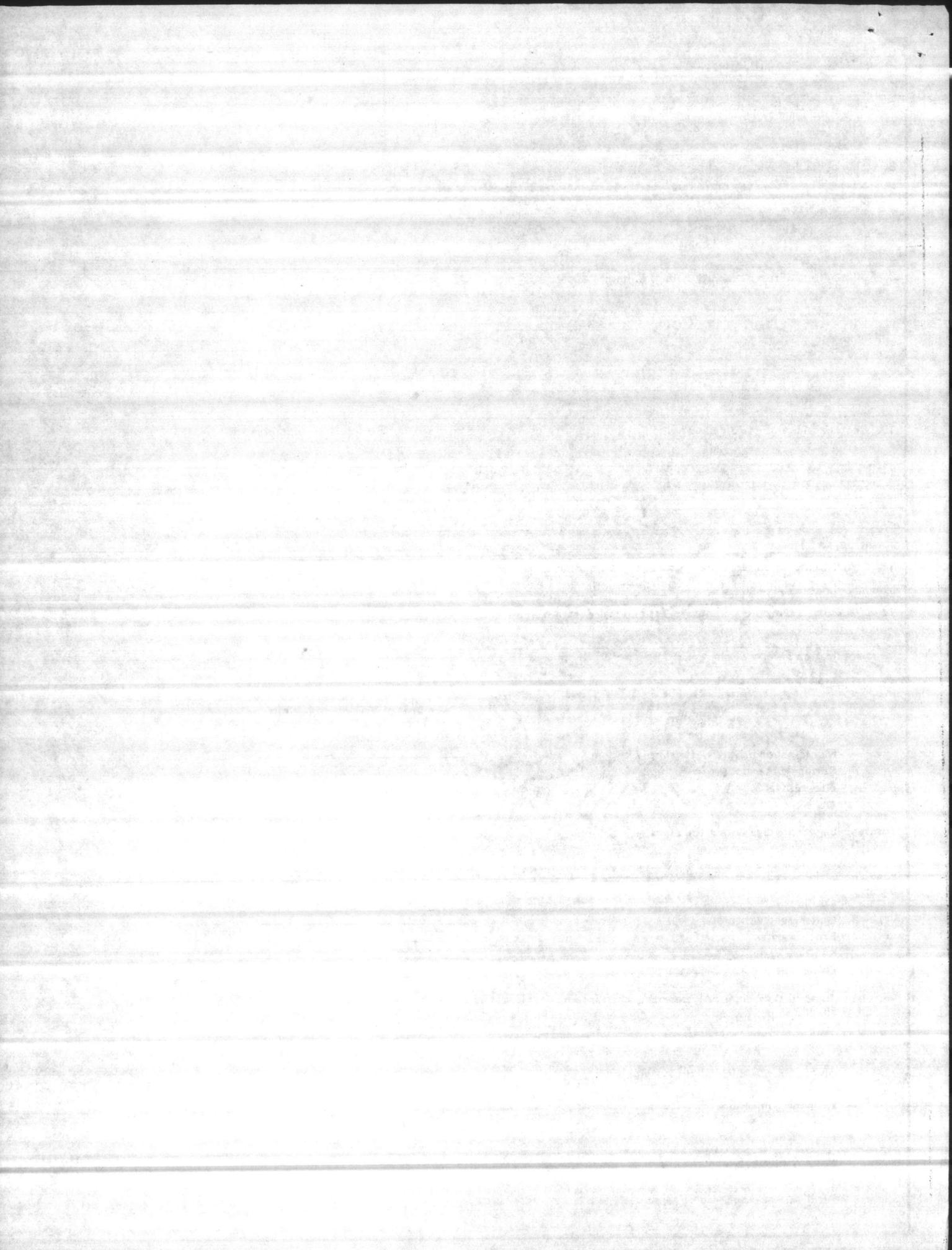
14. Describe water usage within the plant

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Cooling water	
Boiler Feed water	
Process water	
Sanitary system*	
Other	

15. List volume of discharges or losses other than into navigable waters.

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal waste treatment system	
Surface containment	
Underground disposal	
Waste Acceptance firms	
Evaporation	
Consumption	

* Indicate number employees served per day



SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is a. Present <input checked="" type="checkbox"/> b. Proposed new or changed <input type="checkbox"/>	2. Implementation schedule <input type="checkbox"/>	(Office use only)
---	---	-------------------

Name of corporate boundaries within which the point of discharge is located.			6. Discharge Serial No.
State <u>North Carolina</u>	County <u>Onslow</u>	City or Town <u>Camp Lejeune</u>	

State the precise location of the point of discharge. 7. Latitude <u>3 4</u> Degrees; <u>4 2</u> Min; <u>1 0</u> Sec. 8. Longitude <u>7 2</u> Degrees; <u>2 2</u> Min; <u>5 0</u> Sec.	9. Name of waterway at the point of discharge. <u>Tributary Branch to New River</u>
--	--

10. Has application for water quality certification or description of impact been made? If so, give date:

Date	Check if certificate is attached to form <input type="checkbox"/>	Name Issuing Agency
___ mo ___ day ___ yr No		

11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process).

This activity is a swimming pool which is utilized for military training and recreation. The treatment process consists of adjusting the PH of the potable water make-up to prevent skin irritation. Waste from the process consists of filter backwash as required to provide swimming water which is sanitarly acceptable.

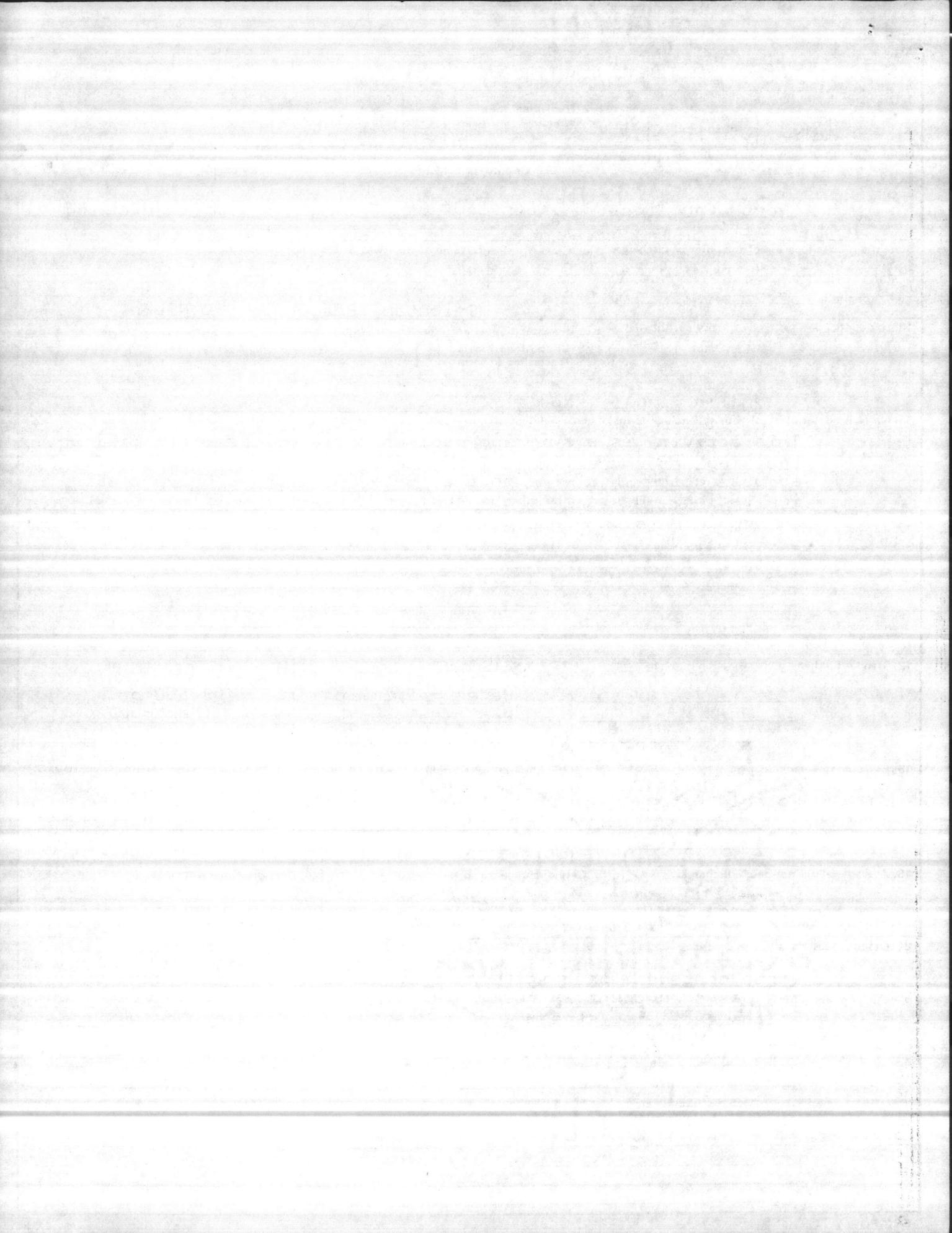
12. Standard industrial classification number. _____ _____ _____	13. Principal product. <u>Water - Swimming Pool {Make-up water}</u>	14. Amount of principal product produced per day. <u>3,500 gal. {Make-up}</u>
---	--	--

15. Principal raw material. <u>Potable water</u>	16. Amount of principal raw material consumed per day. _____ _____ _____	17. Number of batch discharges per day. <u>1 {Filter Backwash}</u>
---	---	---

18. Average gallons per batch discharge. <u>3,500 gal.</u>	19. Date discharge began. ___ mo ___ day ___ yr <u>50</u>	20. Date discharge will begin. ___ mo ___ day ___ yr
---	---	---

21. Describe waste abatement practices.

Waste abatement practice per se is considered unnecessary because the pathogen count in the waste is probably less than ever found in the receiving stream and the thermal quality of the waste is ambient upon reaching the receiving stream.

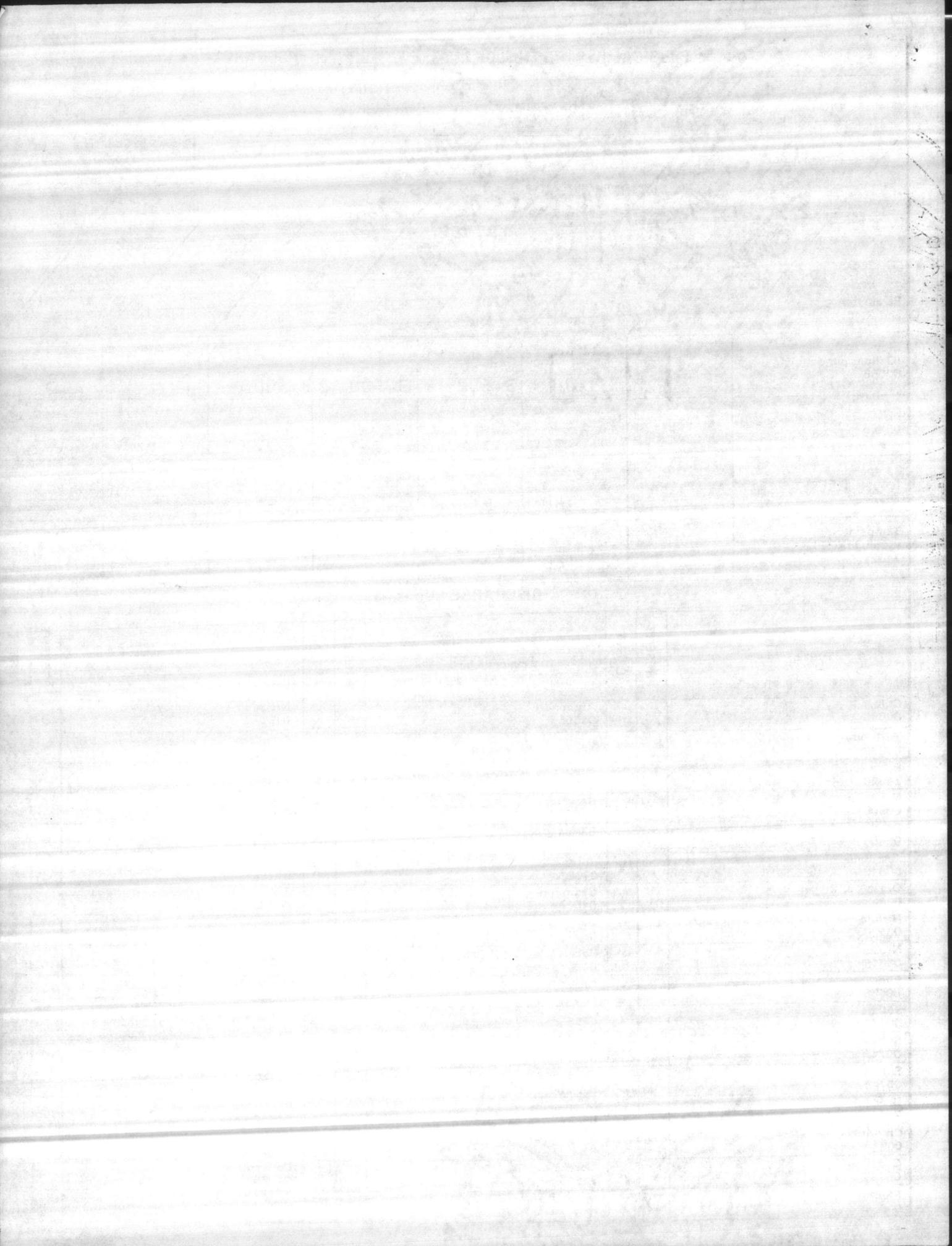


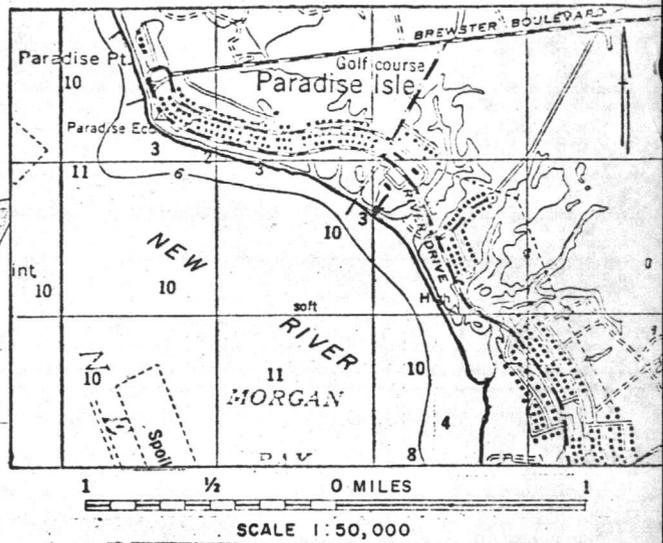
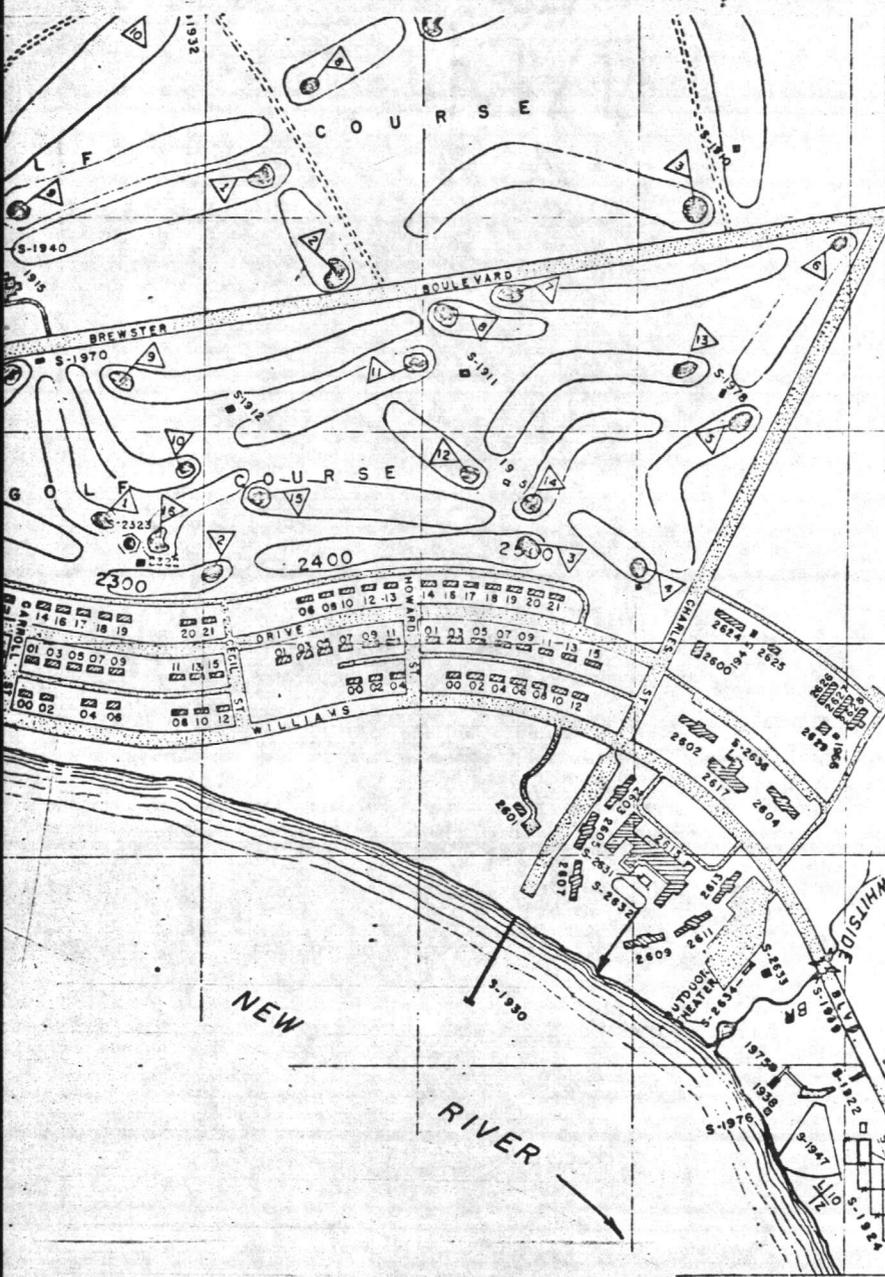
22. PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Intake	Discharge						(Office use only)
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	DISCHARGE SERIAL NO.
Parameter and (Code)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Flow (Gallons per day) 00056		Total operation five months per year.					
		3,500	3,500	3,500	3,500	DYLY	ABS
pH 00400		7.6	7.7	7.7	7.7	"	
Temperature (Winter) (°F) 74028		80	Ambient	Ambient	Ambient		
Temperature (Summer) (°F) 74027		80	"	"	"		

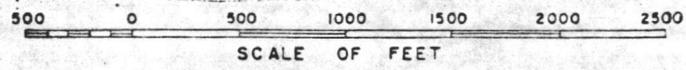
23. DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Turbidity 00070	X		Antimony 01097		X	Selenium 01147		X
Radioactivity 74050		X	Arsenic 01002		X	Silver 01077		X
Hardness 00900	X		Beryllium 01012		X	Potassium 00937		X
Solids 00500	X		Barium 01007		X	Sodium 00929	X	
Ammonia 00610		X	Boron 01022		X	Titanium 01152		X
Organic Nitrogen 00605		X	Cadmium 01027		X	Tin 01102		X
Nitrate 00620		X	Calcium 00916	X		Zinc 01092		X
Nitrite 00615		X	Cobalt 01037		X	Algicides 74051		X
Phosphorus 00665		X	Chromium 01034		X	Oil and Grease 00550		X
Sulfate 00945		X	Copper 01042		X	Phenols 32730		X
Sulfide 00745		X	Iron 01045	X		Surfactants 33260		X
Sulfite 00740		X	Lead 01051		X	Chlorinated Hydrocarbons 74052		X
Bromide 71870		X	Magnesium 00927		X	Pesticides 74053		X
Chloride 00940	X		Manganese 01055		X	Fecal Streptococci Bacteria 74054		X
Cyanide 00720		X	Mercury 71900		X	Coliform Bacteria 74056		X
Fluoride 00951	X		Molybdenum 01052		X			





FROM AMS SERIES V742
SHEET 5553 111



SWIMMING POOL WASTE DISCHARGE
in New River
at Camp Lejeune - Paradise Point Area
County of Onslow, State North Carolina
Application by Commanding General
Sheet 1 of 1 23 June 1971 Date

P, P.

188,000 gal pool

MEDICAL DEPARTMENT
Marine Corps Air Station
(Helicopter)
New River, Jacksonville
North Carolina 28540

216:RWB:bwr
1000.1
05 August 1975

From: Senior Flight Surgeon
To: Water Treatment Plant Operator, MCAS(H) New River, Jacksonville,
North Carolina 28540
Via: Special Services Officer, MCAS(H) New River, Jacksonville, North
Carolina 28540

Subj: Swimming Pools

Ref: Incident on 30 July 1975 in C.O.M.O. Pool

1. In accordance with reference (stated above), involving a child swallowing and breathing a heavy concentration of Chlorine, this report is initiated. This incident occurred after the back washing of the filter when the system was placed back into operation.
2. To alleviate this situation from re-occurring, it is recommended that the operator inform the life guard present to clear the pool of personnel when placing the system back into operation.

RWBearss

R. W. BEARSS
LCDR MC USNR
SENIOR FLIGHT SURGEON

Copy to:
MCAS(H) Safety Officer
File

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY
WASHINGTON, D. C.

1911
August 10

Mr. J. H. ...
New River ...
New River ...

Enclosed for ...

The ...
...
...

To ...
...
...

J. H. ...
...

Very truly,
Sincerely,
...

*pl. prepare memo to ...
outlining procedure at pool.
eg. checking above contact at set intervals;
a logging in log book in medicine room.*

Routing Initials

1	01	AS
2	02	007
3	04	J
4	C1	AR
5	M1	3
	03	U

HEADQUARTERS
Marine Corps Air Station
(Helicopter)
New River, Jacksonville
North Carolina 28540

(1)2A
L 7

AS(H)O 1710.6
201:WMB:ss
7 June 1973

AIR STATION (HELICOPTER) ORDER 1710.6

From: Commanding Officer
To: Distribution List

Subj: Standard Operating Procedures for Swimming Pools

Ref: (a) MCO 1710.17
(b) NAVDOCKS MO-210, ch 3, sec 8
(c) NAVMED P5010-4, ch 4

1. Purpose. To establish standard operating procedures for swimming pools.

2. Responsibility

a. The Medical Officer is responsible for vigilant supervision of those aspects of operation, maintenance, and laboratory practice that pertain to health protection; and for making pertinent recommendations to the Commanding Officer.

b. The Public Works Officer is responsible for the design construction, maintenance, and operation of facility equipment related to swimming pools and bathing areas. The Public Works Officer should assure that routine bacteriological and chemical analysis of water from swimming pools are performed by approved water laboratories.

c. The Special Services Officer is responsible for all other swimming pool operations, including the training and provision of lifeguards, routine pool operations and control, and the enforcement of pool regulations.

3. Regulations for Swimmers. Common sense has developed these rules for conduct of swimmers. These rules will be posted in conspicuous locations in and about the swimming and bathhouse area:



AS(H)O 1710.6
7 June 1973

a. Prior to entering the pool area and/or after using the toilets, all bathers are required to take a cleansing shower in the nude, using soap liberally and paying particular attention to the cleansing of body orifices.

b. Bathers who have been outside the bathhouse area will not re-enter without first taking another shower.

c. No person known to have a fever, cough, cold, inflamed eyes, or ear discharge, or any communicable disease will be allowed use of the pool.

d. No person with sores or other evidence of skin disease, or who is wearing bandages will be allowed in the swimming area.

e. All bathers should make use of toilet facilities prior to showering.

f. Spitting or urinating in the pool, or contaminating it in any other way, and spitting on decks is prohibited.

g. Eating and smoking outside of the designated areas by the swimming pool is prohibited.

h. No pets are allowed in the pool enclosure.

i. No boisterous or rough play, except supervised water sports or training will be permitted in the pool, dressing rooms, shower rooms, or on the runways, or the diving platforms/boards.

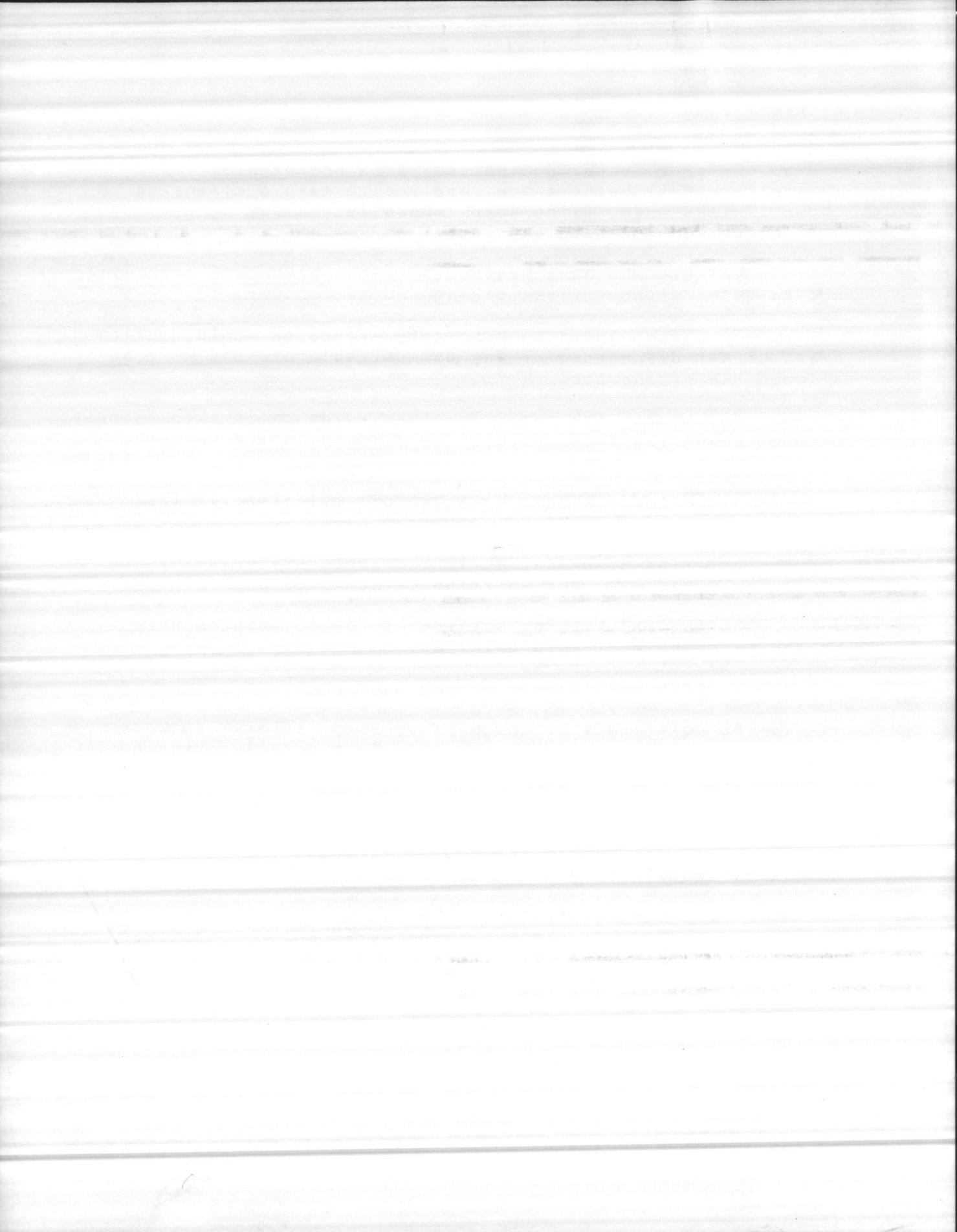
j. Hair length of 5 inches or longer will be covered by a bathing cap when in the pool. This applies to both male and female patrons.

k. The diving platform at the Gym pool is a training device and to be utilized by Marine personnel only during scheduled training exercises under proper supervision.

l. The established maximum capacity of the pools will not be exceeded.

m. Patrons will be responsible for their own personal property.

n. Children under thirteen years of age are not permitted in the swimming pool area unless under the supervision of a responsible adult, except when they have successfully passed



the MCAS (H) Swimming Qualification Test and have been issued identification to that effect.

o. All patrons entering the swimming areas will sign the log book provided.

p. The Special Services Officer may issue such additional rules necessary for the health and safety of the patrons. .

4. Regulations for Lifeguards

a. All lifeguards will maintain current qualifications in accordance with American Red Cross Senior Life Saving requirements.

b. The duties of a lifeguard are to insure the safety of swimmers, prevent abuse of facilities, and to insure generally correct deportment by persons within the pool area, in that order. Their presence is primarily for safety, not policework. Their duties cannot properly be performed by inattentive or distracting personnel or by persons given to argument instead of polite enforcement of reasonable rules.

c. The following practices will be adhered to:

(1) One lifeguard will be seated in the elevated chair, observing swimmers at all hours when the pool is in use (except for classes conducted prior to pool operating hours) unless required elsewhere in the performance of his duties, and such performance is of an emergency nature.

(2) Lifeguards will not enter into conversation with any person except in the course of their duties, and such conversation will be brief and concise.

(3) Lifeguards will not permit any person to loiter in the vicinity of the lifeguard chair nor permit furniture to be placed in the immediate vicinity.

(4) Lifeguards will enforce strictly and impartially published regulations concerning the normal use of the pools and will not tolerate disobedience or disregard of written orders or verbal instructions. Instances of infractions of enlisted pool rules will be reported to the Athletic Officer as soon as possible after their occurrence, together with name, rank, and organization of individuals or their sponsors. Similar infractions of pool rules at the Officers Pool will



AS(H)O 1710.6
7 June 1973

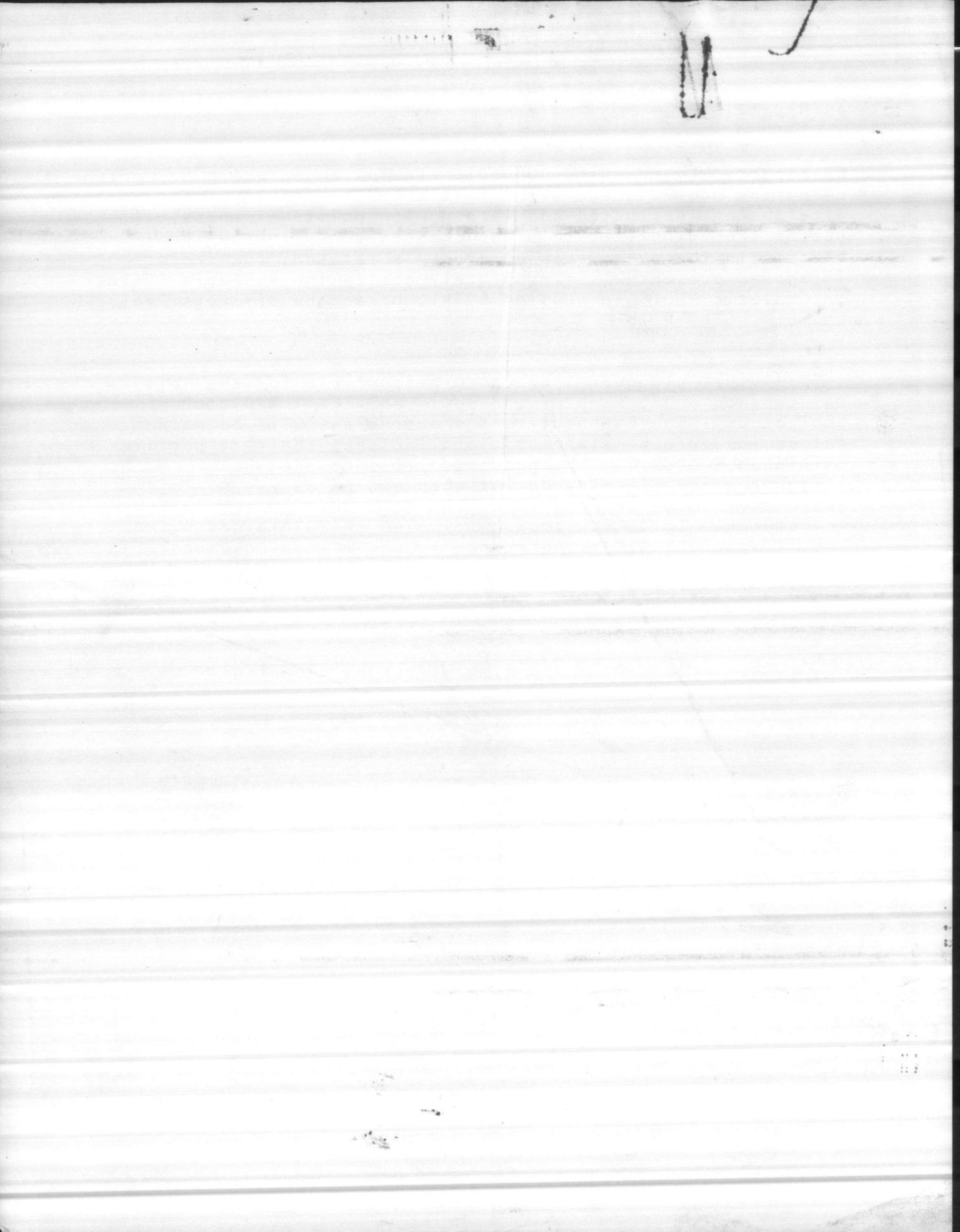
be reported to the OIC, COM (O). In instances where any person using the pool disregards or is disobedient to any instructions, after being instructed and warned with polite firmness, lifeguards are authorized to order such persons from the pool areas. In the event such an order is refused, the senior lifeguard present will immediately notify the Athletic Officer or Athletic NCOIC (extension 6714), or at the Officers Pool, the OIC, COM (O).

(5) Lifeguards are also responsible for the daily maintenance and upkeep of the pools and the immediate pool areas. The bathhouse and shower areas will be maintained in a proper state of cleanliness by their respective maintenance crews. This does not preclude the use of lifeguards for cleaning duties when not on duty. All of these areas must be maintained to the standards set forth in reference (c). Log books will also be maintained by the lifeguard NCOIC in reference to the following areas:

- (a) Patrons utilizing pool.
- (b) PH test results taken every two hours.
- (c) Date and time of vacuum cleaning.

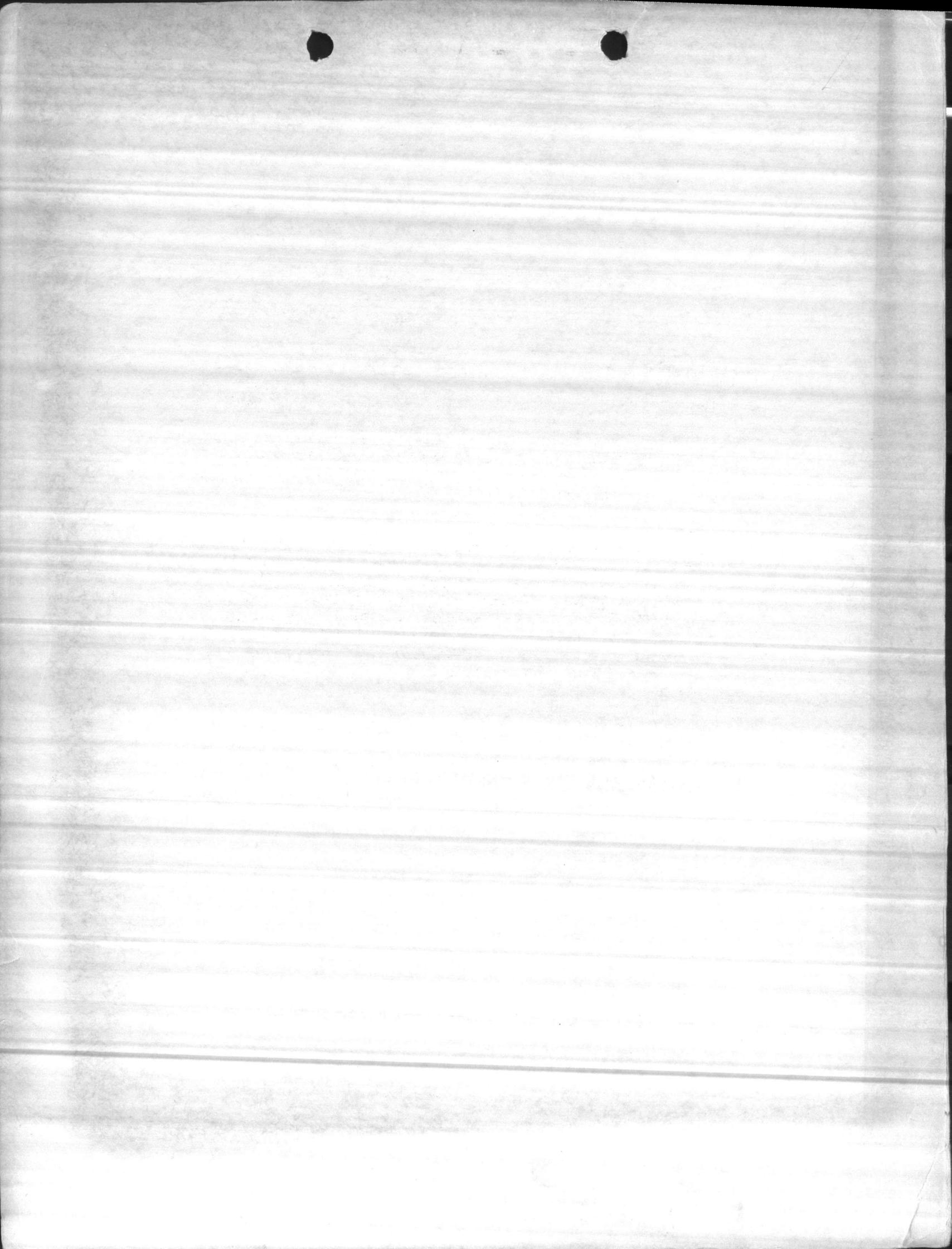

G. C. DOSTER

DISTRIBUTION: "A"
Plus Athletic Office (50)



MANUAL FOR OPERATION OF FILTERING EQUIPMENT
for
AREA 2, 5 & MONTFORD POINT SWIMMING POOLS
CAMP LEJEUNE, NORTH CAROLINA
Part 1 & 2

2



Employee Training On-The-Job In Operation Of Filtering Equipment
For Area 2, 5 & Montford Point Swimming Pools.

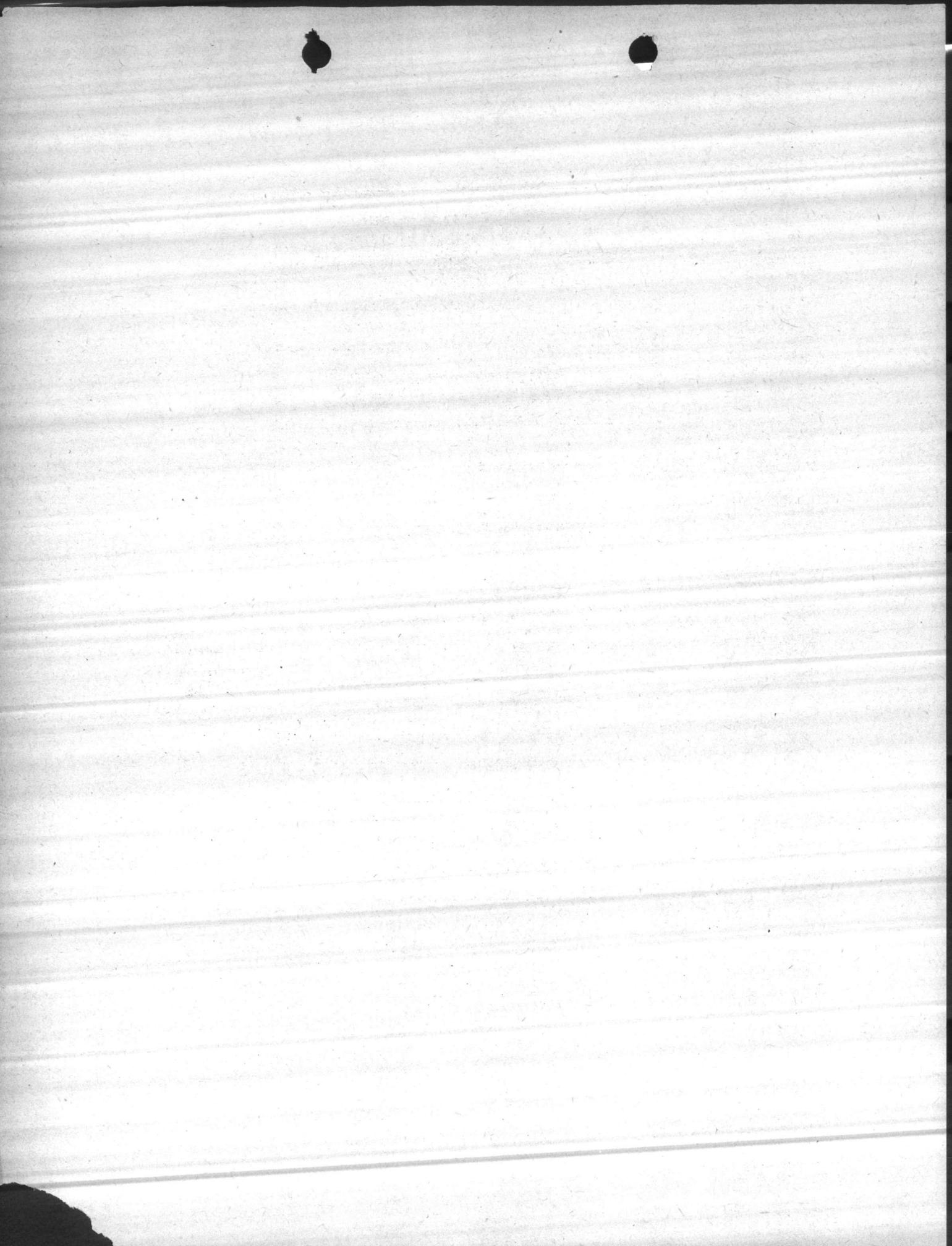
1. The Purpose - The purpose of this training and manual is to provide means for increasing the efficient operation and maintenance of water filtering equipment by the old and new employee.

2. The Problem - There is a considerable turn-over in the personnel which results in a continuous training problem. The by-word-of-mouth and demonstration method was found inadequate due to the lack of a clear, concise reference in everyday language.

3. The Organization - The organization chart for training outlines the training channel and presents to the employee a visual aid in the part they hold on the job. It also establishes the responsibility of all personnel in training.

4. The Manual - The manual is the textbook to be used by the employees for reference and study. Column 1., outlines "What The Operator Must Do", and column 2., "How It Is Accomplished". These columns are under the headings: Starting Equipment, Operation of Plant, Shutting Down Plant, Washing Filters, Filling Pool, and Clean Strainer. Reference is made throughout the text to various valves identified by letters. These valves are shown on the drawings in the back of the manual. There are also a daily log and two maintenance lubrication check lists which are self explanatory.

5. This manual was compiled by Mr. N. H. Kellam under the direction of the Camp Vocational Training Officer. Mr. Kellam is the chemist in charge of water treatment for plants, swimming pools, certain wells, and industrial laboratories at Camp Lejeune, under the Camp Utilities Officer, Engineer Division, Camp Quartermaster.



ORGANIZATION CHART FOR
TRAINING EMPLOYEES IN THE
OPERATION OF FILTERING EQUIPMENT
IN SWIMMING POOLS

UTILITIES OFFICER

VOCATIONAL TRAINING OFFICER

WATER TREATMENT

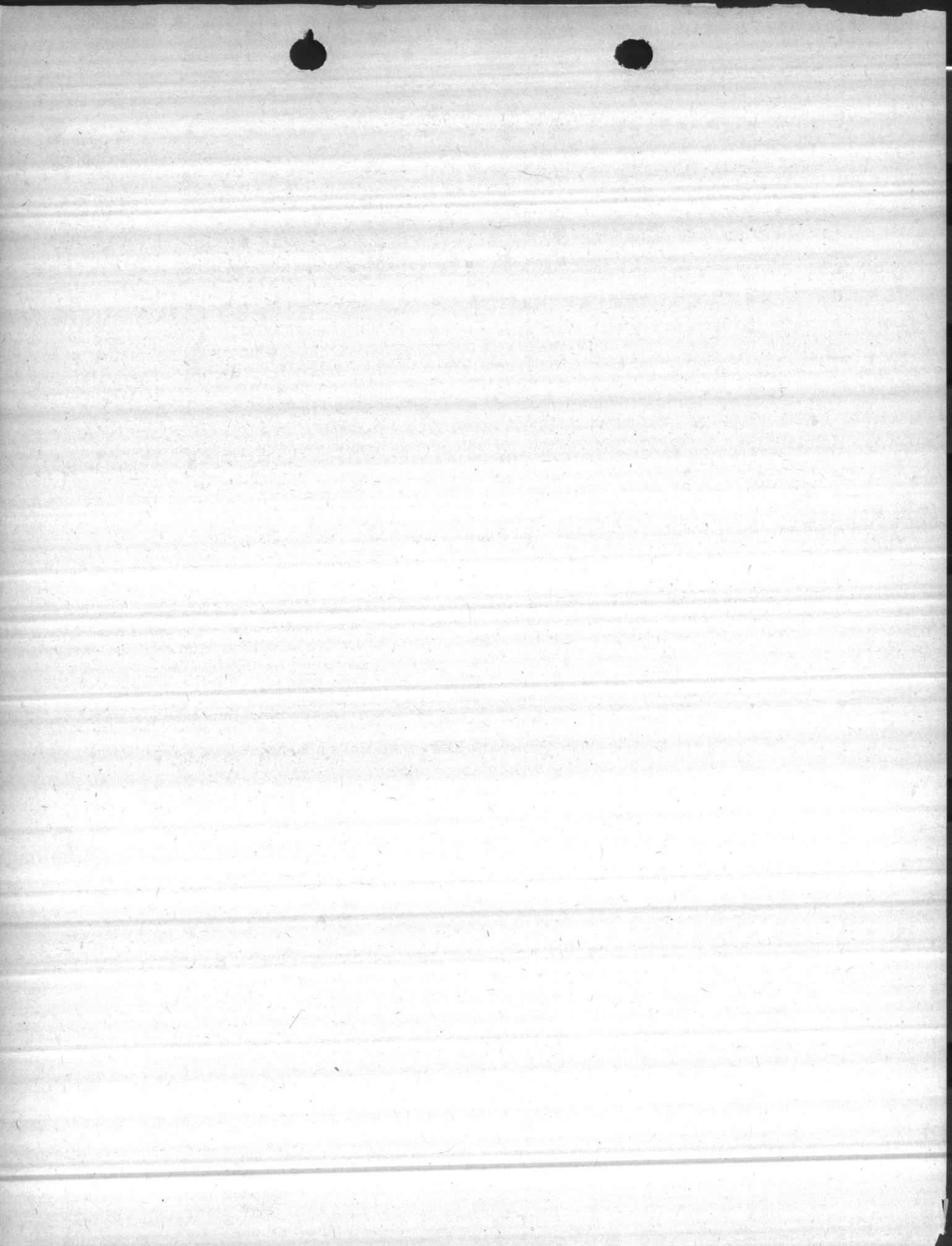
INSTRUCTOR
(CHEMIST)

SWIMMING POOLS
AREA 2, 5 & MONTFORD PT.

TRAINERS
(ENGINEMEN)
(MAINTENANCE MEN)

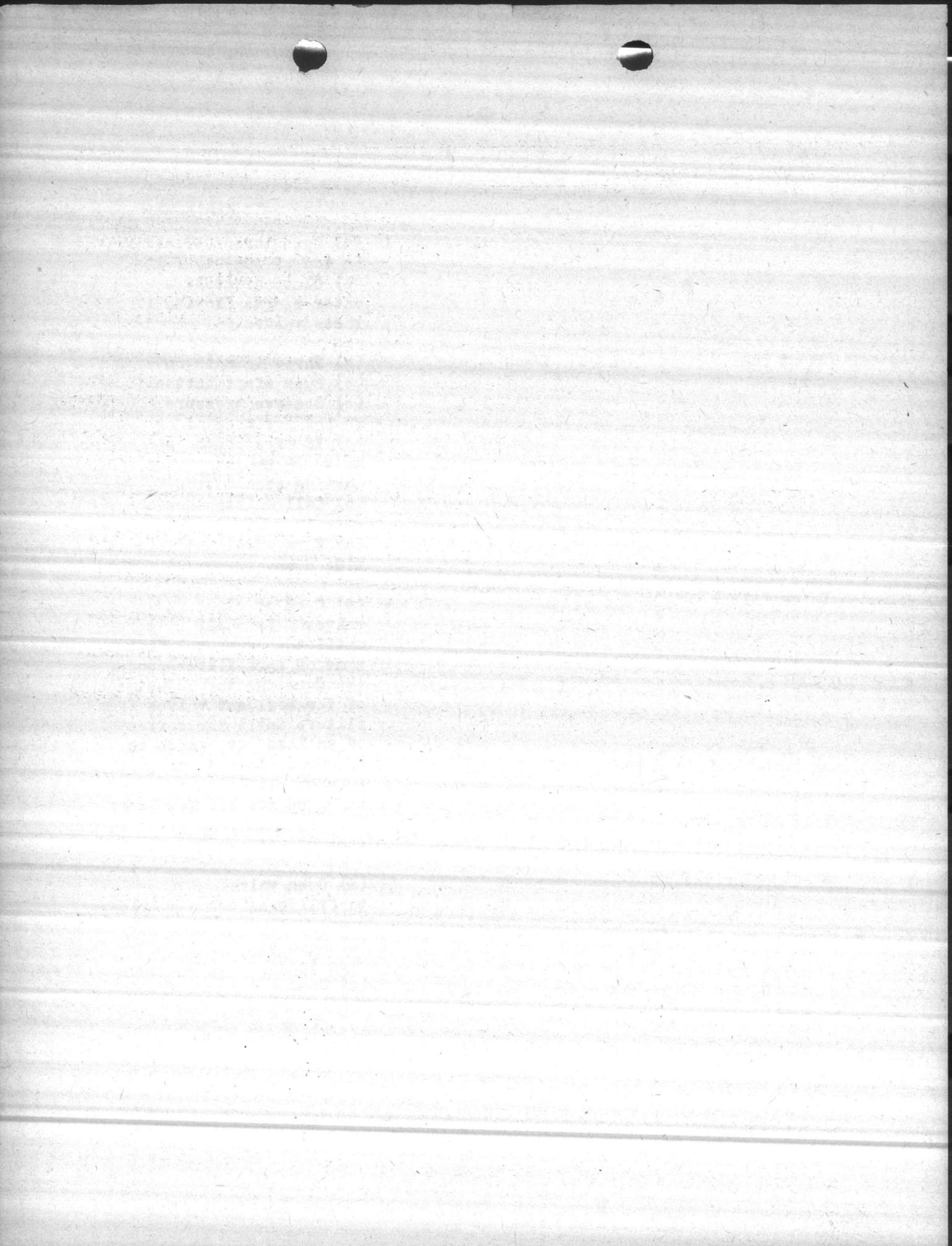
OPERATORS

Part I



STARTING EQUIPMENT

WHAT OPERATOR MUST DO	HOW ACCOMPLISHED
1. Release air from pump.	1. (a) Open three (3) air valves on top of pump to release air. (b) Close air valves when water starts flowing from these valves.
2. Start pump.	2. (a) Throw in main power switch (b) Push start button for pump. (c) Observe pressure gauge for 25 lbs. or more of pressure. (d) If pressure does not build up to 25 lbs. <u>stop</u> pump by pushing stop button. (e) Call maintenance man.
3. Open effluent valve marked #1.	3. (a) Turn wheel until it is wide open.
4. Check filter gauges for equalized pressure.	4. (a) Open or close effluent valves M from ALL filters until the pressure reads the same on each filter gauge. (b) Continue the adjustment of the effluent valves from filters until the correct flow of gallons per minute is reached, (this figure varies in each plant.) (c) Open air release lines on filters until all air has escaped - then close.
5. Start chlorinator.	5. (a) Open valve on water line to fill sealing tray, (leave open). (b) When sealing tray fills open large valve on water line. (c) Open valve on top of chlorine cylinder. (d) Check pressure on chlorine pressure gauge.



WHAT OPERATOR MUST DO

HOW ACCOMPLISHED

(e) Adjust feed of chlorine to desired amount by turning valve on front of chlorinator.

(f) Safety Precaution.

1. Do not open valve on cylinder if there is no water flowing.

2. Check all connections with ammonia for leak by passing open bottle of ammonia under connection. If white smoke appears shut off valve on top of cylinder and call the maintenance man immediately.

6. Start ammoniator.

6. (a) Close valve marked blow-off valve.

(b) Open shut off valve on front of machine.

(c) Close flow control valve on side of machine.

(d) Open valve on top of ammonia cylinder.

(e) Regulate flow with valve on side of machine until the pre-determined amount is registered on the gauge in front.

OPERATION OF PLANT

WHAT OPERATOR MUST DO

HOW ACCOMPLISHED

1. Check the flow of water to the pool hourly.
 1. (a) Read flow gauge and record on daily report.
 - (b) If flow gauge drops below 600 gallons per minute.
 1. Check pressure and adjust if required.
 2. Check pump for operation.
 3. If trouble is not located shut off pump, and notify maintenance man.
2. Check chlorine hourly.
 2. (a) Collect samples.
 - (b) Add indicator solution.
 - (c) Compare color with standards set.
 - (d) Record on daily report.
 - (e) If samples show on tests a different reading than .5 p. p. m., (parts per million) adjust feed on chlorinator to arrive at desired amount.
3. Keep plant clean.
 3. (a) Sweep floors.
 - (b) Dust off equipment.
 - (c) Clean windows (when needed).
 - (d)
4. Check temperature twice daily.
 4. (a) Regulate if not at right reading.
 - (b) To increase open up on valve H2.
 - (c) To decrease close down on valve H2.
 - (d) The heater is equipped with a automatic control valve and this should not be tampered with, so to change you increase or decrease the amount of water flowing through heater.

SHUTTING PLANT DOWN

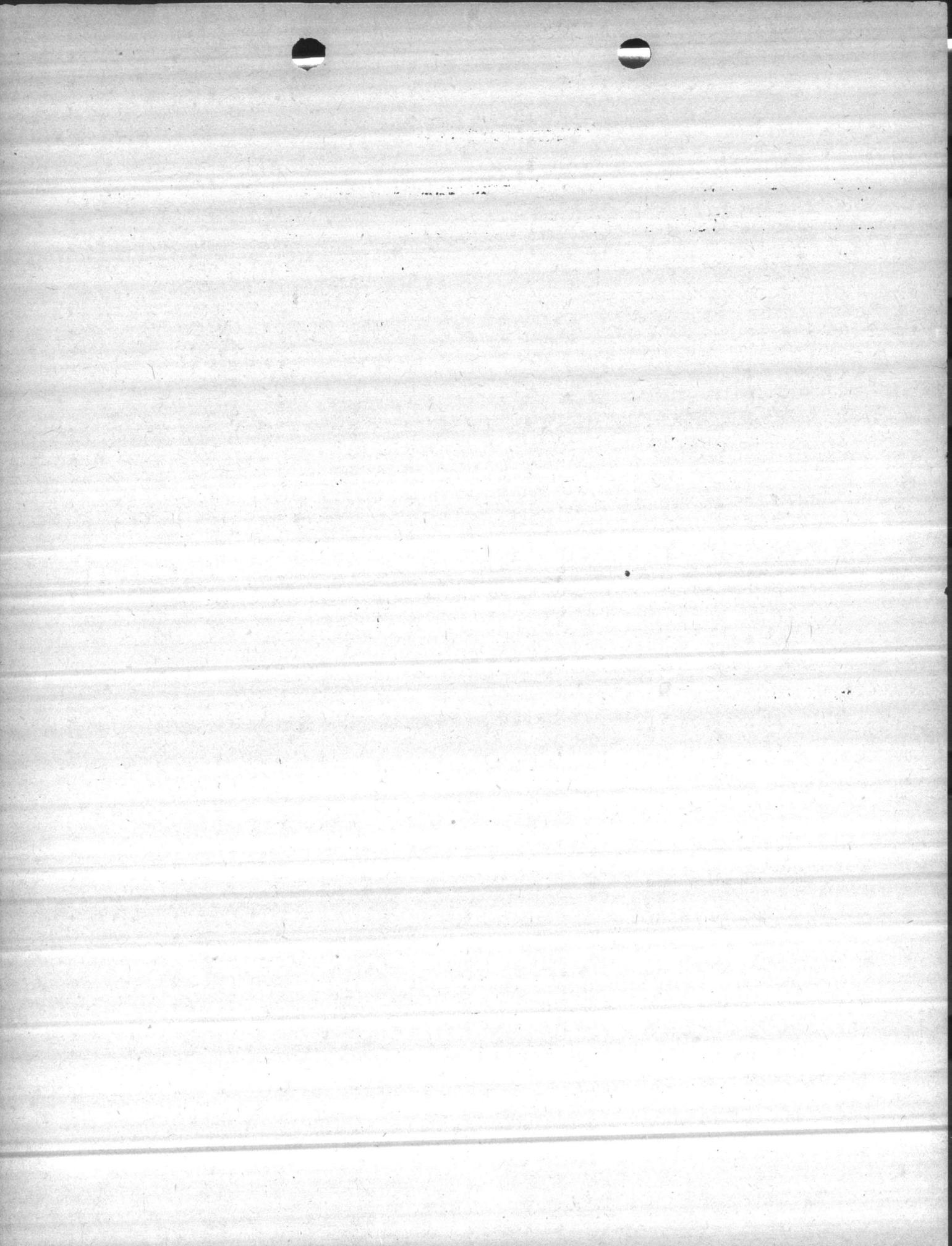
WHAT OPERATOR MUST DO

HOW ACCOMPLISHED

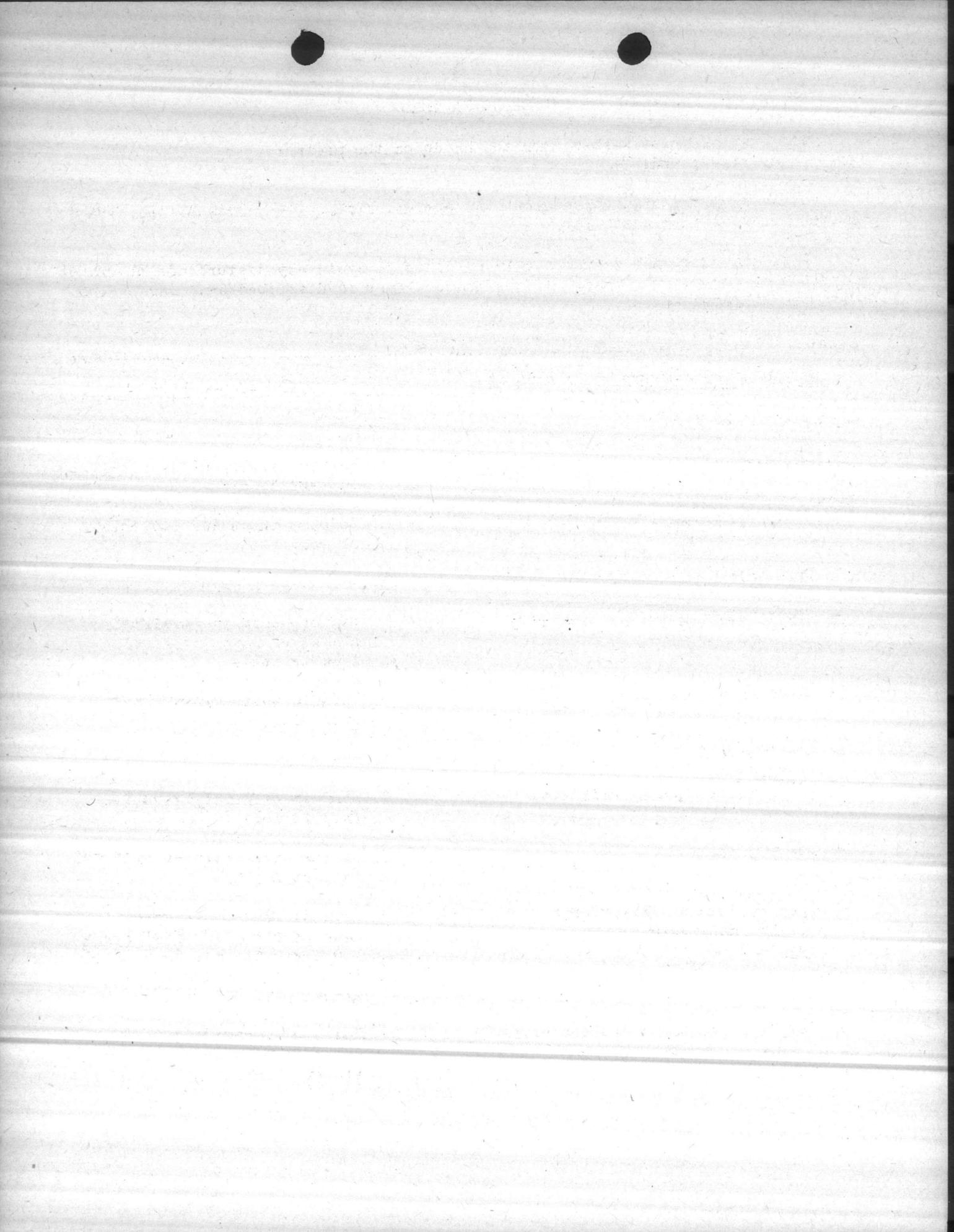
1. Close down chlorinator.
 1. (a) Close valves on top of chlorine cylinders.
 - (b) After closing valve wait until chlorine clears out of bell-jar. NOTE: This will be approximately 30 minutes.
 - (c) Close valves on water lines.

2. Close down ammoniator.
 2. (a) Close valve on top of cylinder.
 - (b) Wait until pressure equalizes on both gauges. Note: About 30 minutes.
 - (c) Open blow-off line when pressure equalizes.
 - (d) When pressure reaches zero close shut off valve on front of machine.
 - (e) Close flow control valve on side of machine.

3. Close down pump.
 3. (a) Close effluent valve marked #1.
 - (b) Push stop button for pump.
 - (c) Pull out main power switch.



PART 2



WASHING FILTERS

Filters should be washed when the hands on the pressure gauge show the difference of 4 pounds.

It is very important throughout the operation that all valves be operated in the order as outlined below.

Open and close all valves slowly in order to avoid any disturbance of gravel layers that support the sand. If the gravel layer is disturbed sand may escape with the filtered water.

WHAT OPERATOR MUST DO

HOW ACCOMPLISHED

A. Washing Filters.

- | | |
|--|---|
| 1. Shut pump off if running. | 1. Follow directions as outlined in part 1. |
| 2. Close valve no. 1 & no. 3. | 2. Be sure these are completely closed. |
| 3. Open valve no. 2 & 4. | 3. - - - - - |
| 4. Close valve marked E. | 4. Be sure this is completely closed or wash water will flow to pool. |
| 5. Close valve marked H1. | 5. This is waste water valve over pit. |
| 6. Open valve C. | 6. - - - - - |
| 7. Close valve M on all filters. | 7. This is effluent valve from each filter. |
| 8. Start pump. | 8. Follow directions as outlined in part no. 1. |
| 9. Open valve M on filter no.1 slowly until rate of flow is <u>1400</u> G.P.M. | 9. Washing must be at specified rate of flow, if flow is too low dirt will not be removed, if too high sand will be washed out. |
| 10. Complete washing of filter no.1. | 10. Washing is complete when water flowing to waste is almost clear. |

WHAT OPERATOR MUST DO

HOW ACCOMPLISHED

11. Open valve M on filter no. 2.

11. Each filter must be washed individually and in sequence.

12. Close valve M on filter no.1.

12. This closes off filter no.1.

13. Complete washing filter no.2.

13. Washing is complete when water flowing to waste is almost clear.

14. Open valve M on filter no.3.

14. - - - - -

15. Close valve M on filter no.2.

15. This closes off filter no.2.

16. Complete washing of filter no.3.

16. Washing is complete when water flowing to waste is almost clear.

17. Close valve M on filter no.3.

17. This closes off filter no.3.

18. Shut off pump.

18. Follow directions as outlined in part no.1.

B. Rewashing.

B. This is important before filter can be placed in service after washing.

1. Close valves no. 2 & 4.

1. - - - - -

2. Open valves no. 1 & 3.

2. - - - - -

3. Close valve C.

3. This is waste water valve.

4. Open valve M on all filters.

4. This is effluent valves on filters.

5. Open valve D.

5. This is filter to waste valve.

6. Start pump.

6. - - - - -

7. Observe water, when clear close valve M part of way on all filters.

7. This must be done to prevent too much water from flowing through filters on next operation.

8. Open valve E and close valve D.

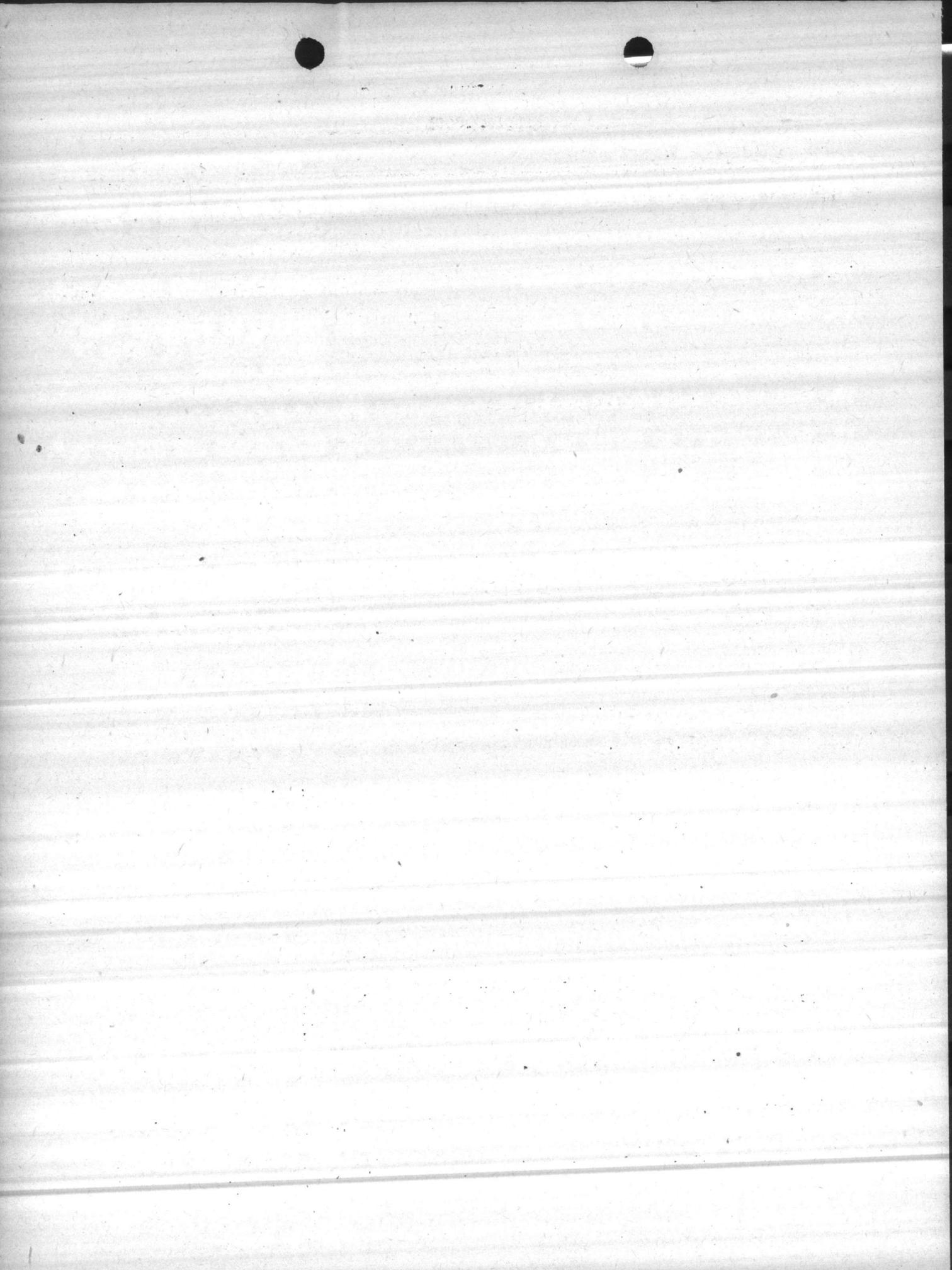
8. This starts water flowing back to pool.

9. Open valve H.

9 This turns water through heater.

10. Regulate pressure & flow as when starting plant.

10. Be sure this is completely closed or wash water will flow to pool.



FILLING POOL

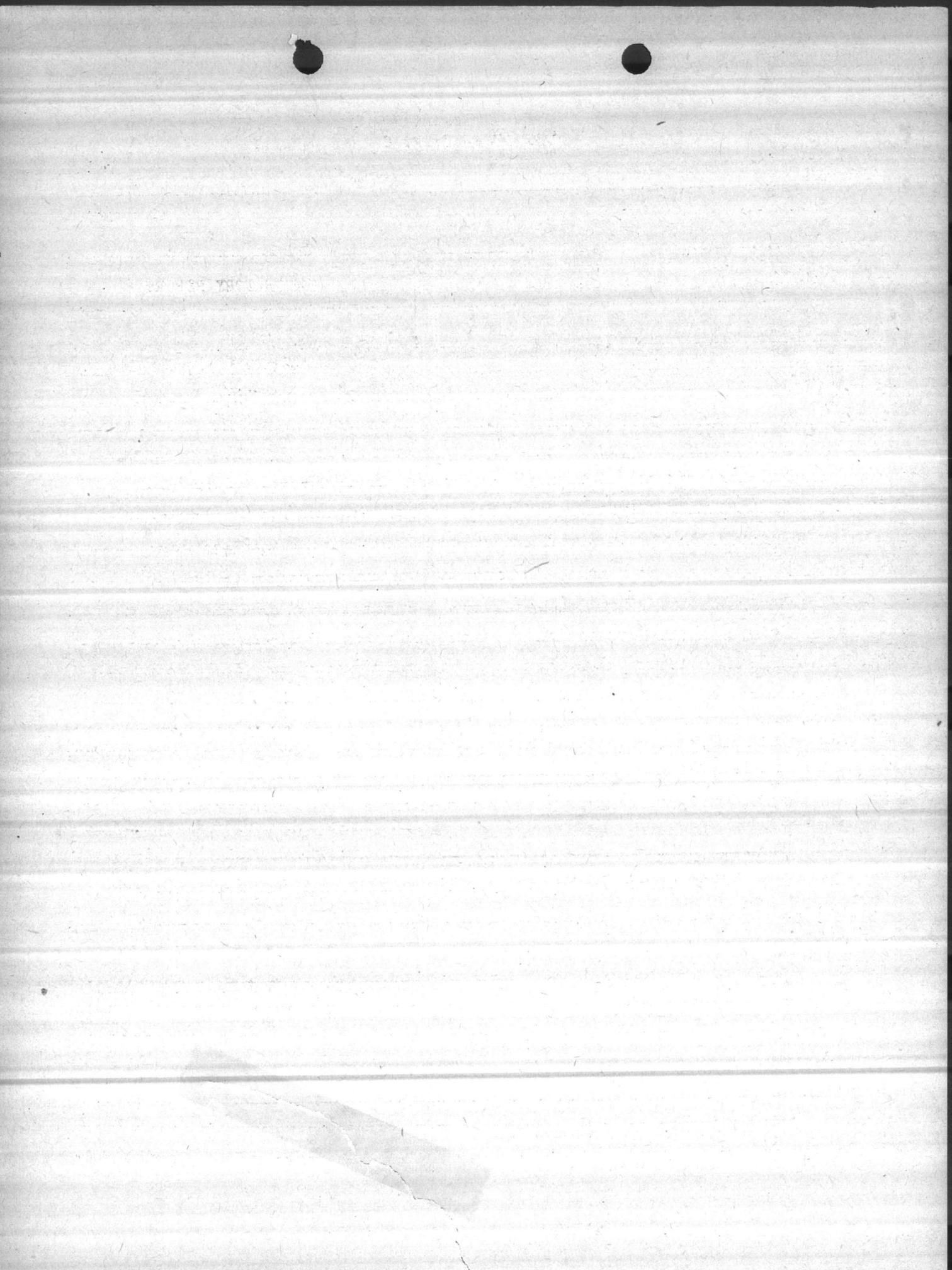
WHAT OPERATOR MUST DO

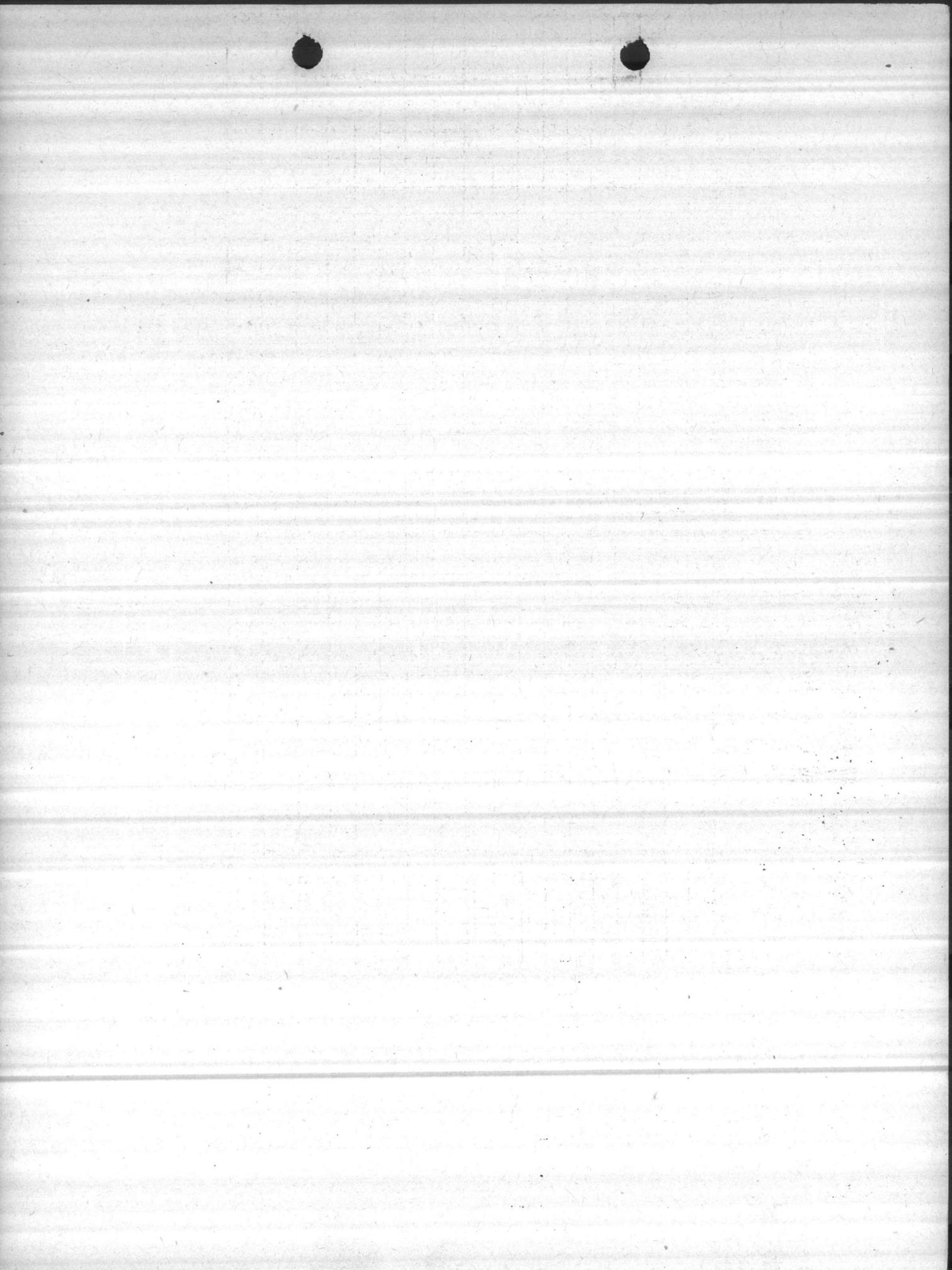
HOW ACCOMPLISHED

- | | |
|--|--|
| 1. Check pump. | 1. Shut down if running. |
| 2. Open valve P. | 2. This is located in cabinet at the pool. |
| 3. Observe pool for being full, when full close valve P. | 3. ----- |

CLEAN STRAINER

WHAT OPERATOR MUST DO	HOW ACCOMPLISHED
1. Close valves A & F. Valve B remains closed at all times.	1. Valve B is a by pass valve.
2. Remove cap from top.	2. Use wrench to loosen nut on top of container.
3. Remove strainer and replace with clean one.	3. Place dirty strainer in air until it dries then use brush to remove hair.
4. Replace cap.	4. - - - - -
5. Open valve A & F.	5. - - - - -





Location _____

LUBRICATION & SERVICE OF SWIMMING POOL EQUIPMENT

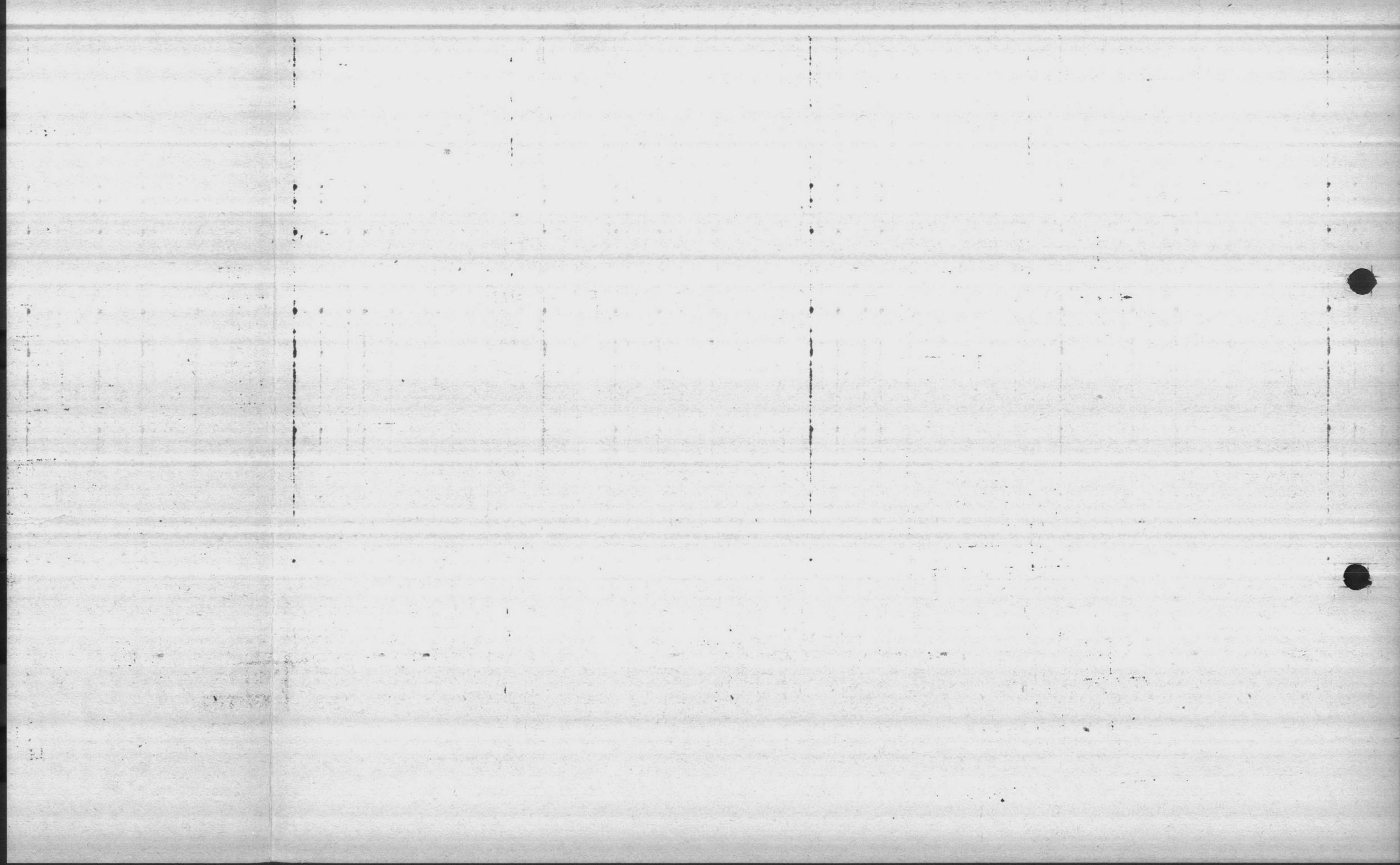
Month of _____

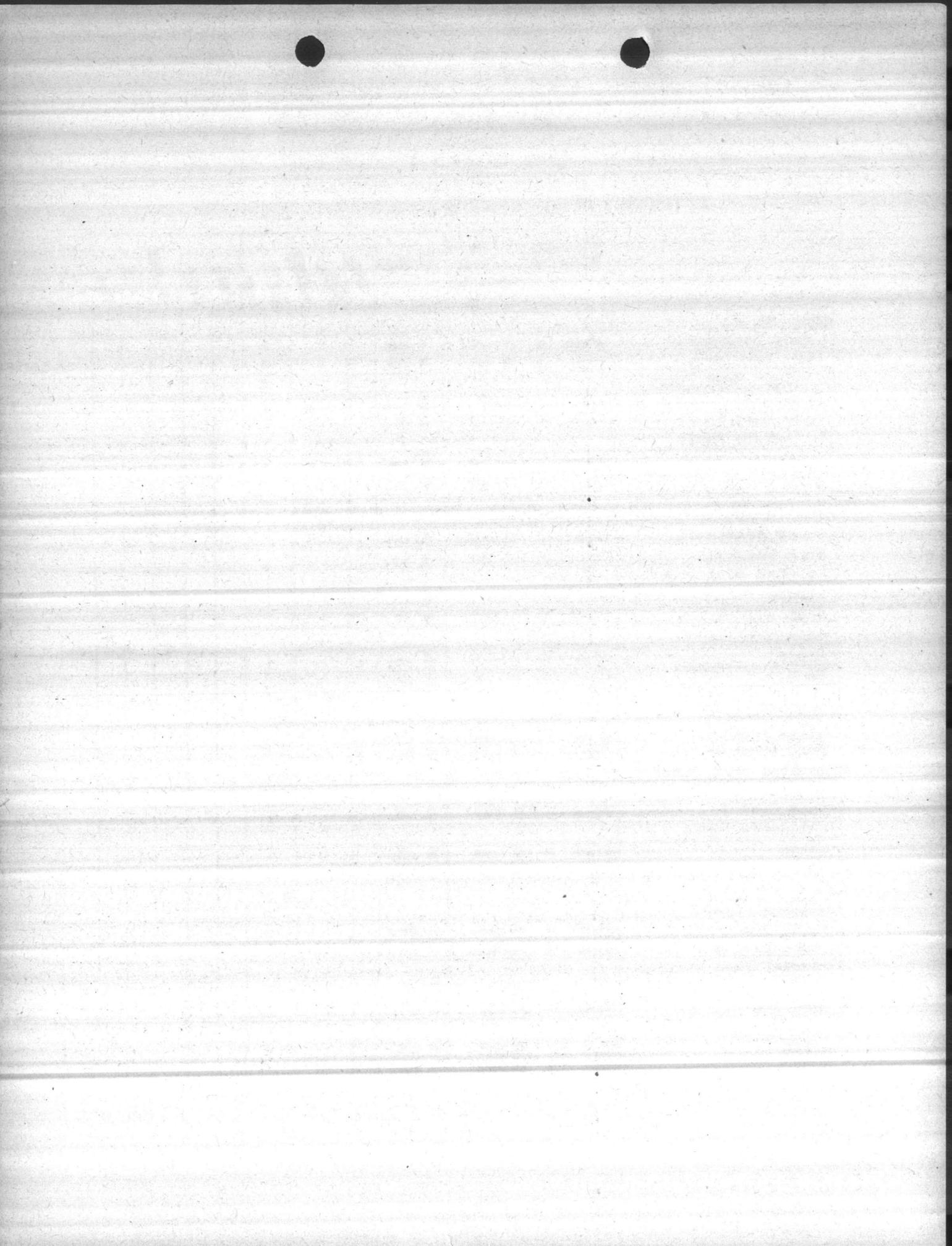
Unit	Fittings		Type of oil or grease	Check	Add	Change	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
	Type	No.																																					
Circulating Pump	1																																						
Motor	1	Alem	2	G	"Med"	Weekly																																	
Pump	1	Plug	2	G	"Med"	Weekly																																	
Chem. Feed Pumps																																							
Motors	3	Cup	1	O	"20"	Weekly																																	
Gear Case	3	Plug	1	O	"140"	Weekly																																	
Cross H Bearings	3	Alem	1	G	"Med."	Weekly																																	
Connecting Rods	3	Alem	1	G	"Med."	Weekly																																	
Exhaust Fans																																							
Motor	1	Cup	2	O	"20"	Weekly																																	
Fan	1	Cup	2	O	"40"	Weekly																																	
Condensate Pumps																																							
Motors	2	Alem	2	G	"Med."	Weekly																																	
Pumps	2	Cup	2	G	"Med."	Weekly																																	
Check Valves	2	Alem	2	G	Graphite	Monthly																																	
Exhaust Fans 1st. Floor	4	Cup	2	O	"20"	Weekly																																	
Exhaust Fans Cupalo	2	Plug	2	G	"Med"	Monthly																																	
Heater Fans	6	Cup	2	O	"20"	Monthly																																	

x Add if needed. When added insert / under correct date, when charged insert C under date.

- "Med" Medium weight.
- "20" SAE 20 motor oil.
- "140" SAE 140 Gear oil.

A Transfer each month to Master Chart

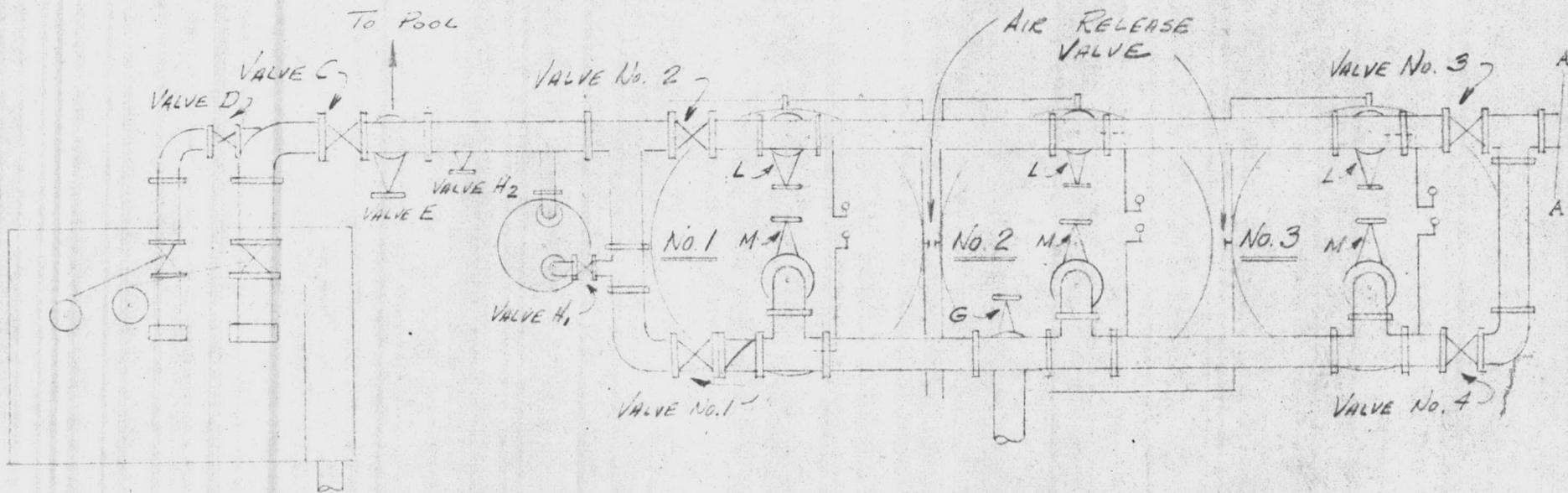
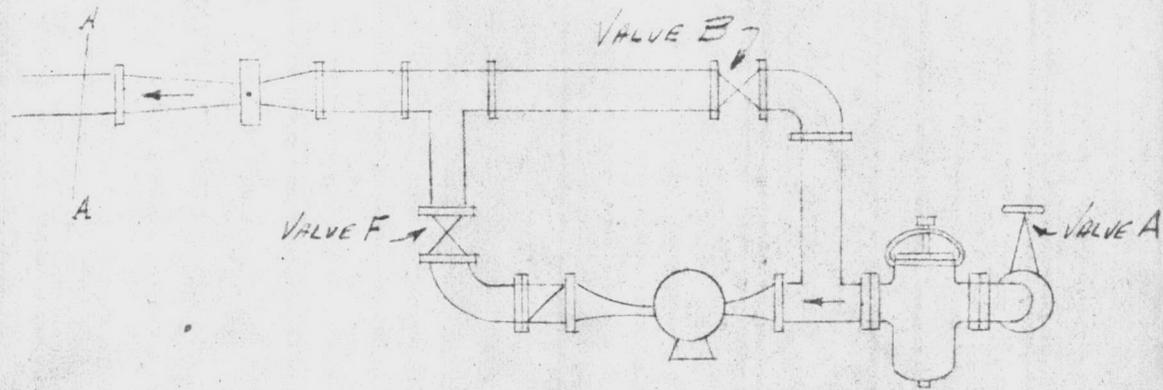




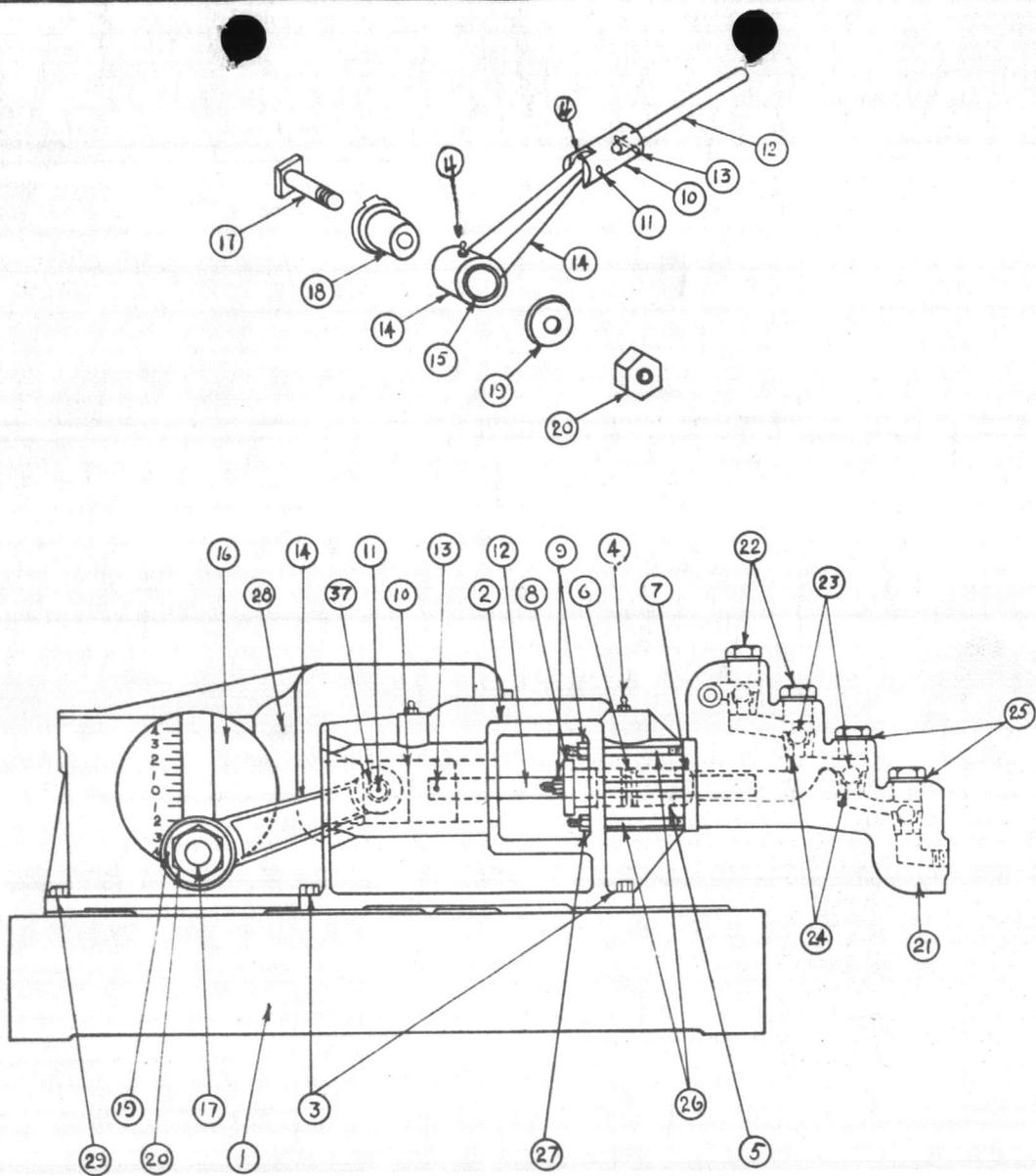
SWIMMING POOLS
AREA 2, 5, & MONTFORD PT.

DESIGNATION OF VALVES

- NO. 3 & L - RAW WATER INLET
- NO. 4 - WASH WATER INLET
- C - WASH WATER OUTLET
- E & M - FILTERED WATER OUTLET
- 1 & 2 - CONTROL VALVES
- H₁ & H₂ - HEATER INLET & OUTLET
- D - WASTE WATER OUTLET
- G - DRAIN



MAY 25 1945



NOMENCLATURE OF PUMP

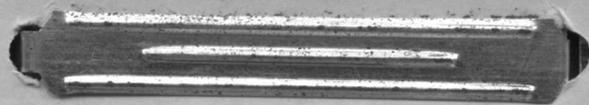
1	BASE	11	CROSSHEAD PIN	21	VALVE
2	PUMPING HEAD	12	PISTON	22	VALVE CAPS
3	HEAD BASE BOLTS	13	PISTON PIN	23	VALVE CHECKS
4	ZERK FITTINGS	14	CONNECTING ROD	24	VALVE SEATS
5	PACKING	15	ROD BUSHING LARGE	25	VALVE CAP GASKETS
6	LANTERN RING	16	DRIVE WHEEL	26	VALVE DRAW BARS
7	GLAND	17	DRIVE WHEEL PIN	27	DRAW BAR HEX. NUTS.
8	GLAND CAP	18	DRIVE WHEEL COLLAR (SEE DETAIL)	28	MOTOR
9	GLAND CAP NUTS	19	DRIVE WHEEL WASHER	29	MOTOR BASE BOLTS
10	CROSSHEAD	20	DRIVE WHEEL HEX NUTS	37	CON-ROD BUSHING SMALL

MILTON ROY PUMPS
1300 E. MERMAID AVENUE
PHILADELPHIA, PA.

DATE 2-3-41	DRAWING NO. 1190
SCALE NONE	DRAWN BY W.G.D.

JUN 22 1945





1
2
3
4

5. Date Jun 23 71 (Office use only)

6. Check type of application: a. Original b. Revision

7. Number of original application _____

8. Name of facility where discharge or construction will occur.
2nd Area Swimming Pool {Bldg. 236}

9. Full mailing address of facility named in item 8 above.
Marine Corps Base
Camp Lejeune, N. C. 28542

10. Names and mailing addresses of all adjoining property owners whose property also adjoins the waterway.

11. Check to indicate the nature of the proposed activity:
 a. Dredging b. Construction c. Construction with Discharge d. Discharge only

12. If activity is temporary in nature, estimate its duration in months.

If application is for a discharge:

13. List intake sources

Source	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal or private water supply system	0.1
Surface water body	
Ground water	
Other	

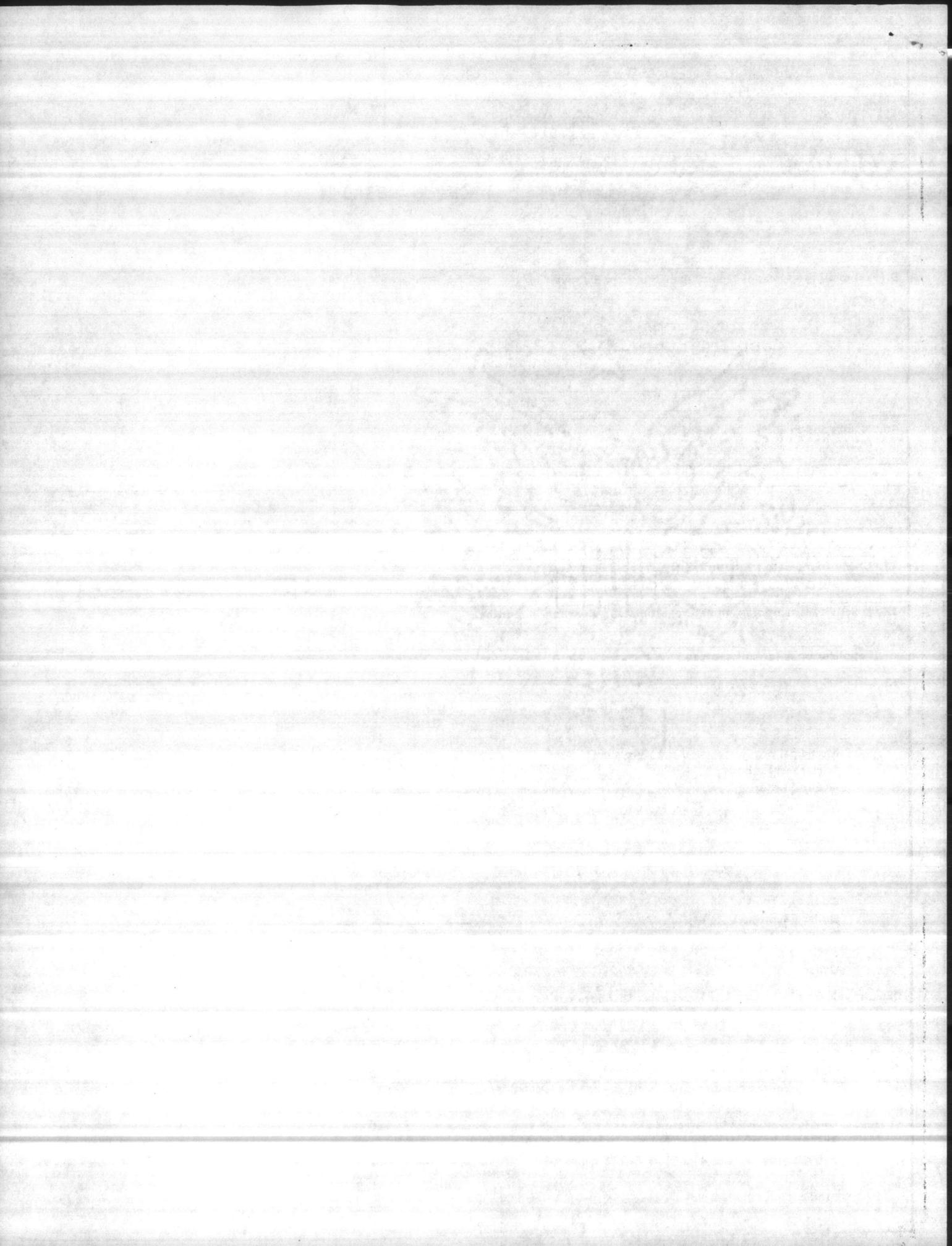
14. Describe water usage within the plant

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Cooling water	
Boiler Feed water	
Process water	
Sanitary system*	
Other	

15. List volume of discharges or losses other than into navigable waters.

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal waste treatment system	
Surface containment	
Underground disposal	
Waste Acceptance firms	
Evaporation	
Consumption	

* Indicate number employees served per day



SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is a. Present <input checked="" type="checkbox"/> b. Proposed new or changed <input type="checkbox"/>	2. Implementation schedule <input type="checkbox"/>	(Office use only)
--	--	-------------------

Name of corporate boundaries within which the point of discharge is located. State: <u>3. North Carolina</u> County: <u>4. Onslow</u>	6. Discharge Serial No. <u>5. Camp Lejeune</u>
---	--

State the precise location of the point of discharge. 7. Latitude <u>34</u> Degrees; <u>40</u> Min; <u>10</u> Sec. 8. Longitude <u>77</u> Degrees; <u>21</u> Min; <u>20</u> Sec.	9. Name of waterway at the point of discharge. <u>Tributary Branch to New River</u>
---	---

10. Has application for water quality certification or description of impact been made? If so, give date:

Date: Check if certificate is attached to form Name Issuing Agency: _____

_____ mo _____ day _____ yr No

11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process).

This activity is a swimming pool which is utilized for military training and recreation. The treatment process consists of adjusting the PH of the potable water make-up to prevent skin irritation. Waste from the process consists of filter backwash as required to provide swimming water which is sanitarly acceptable.

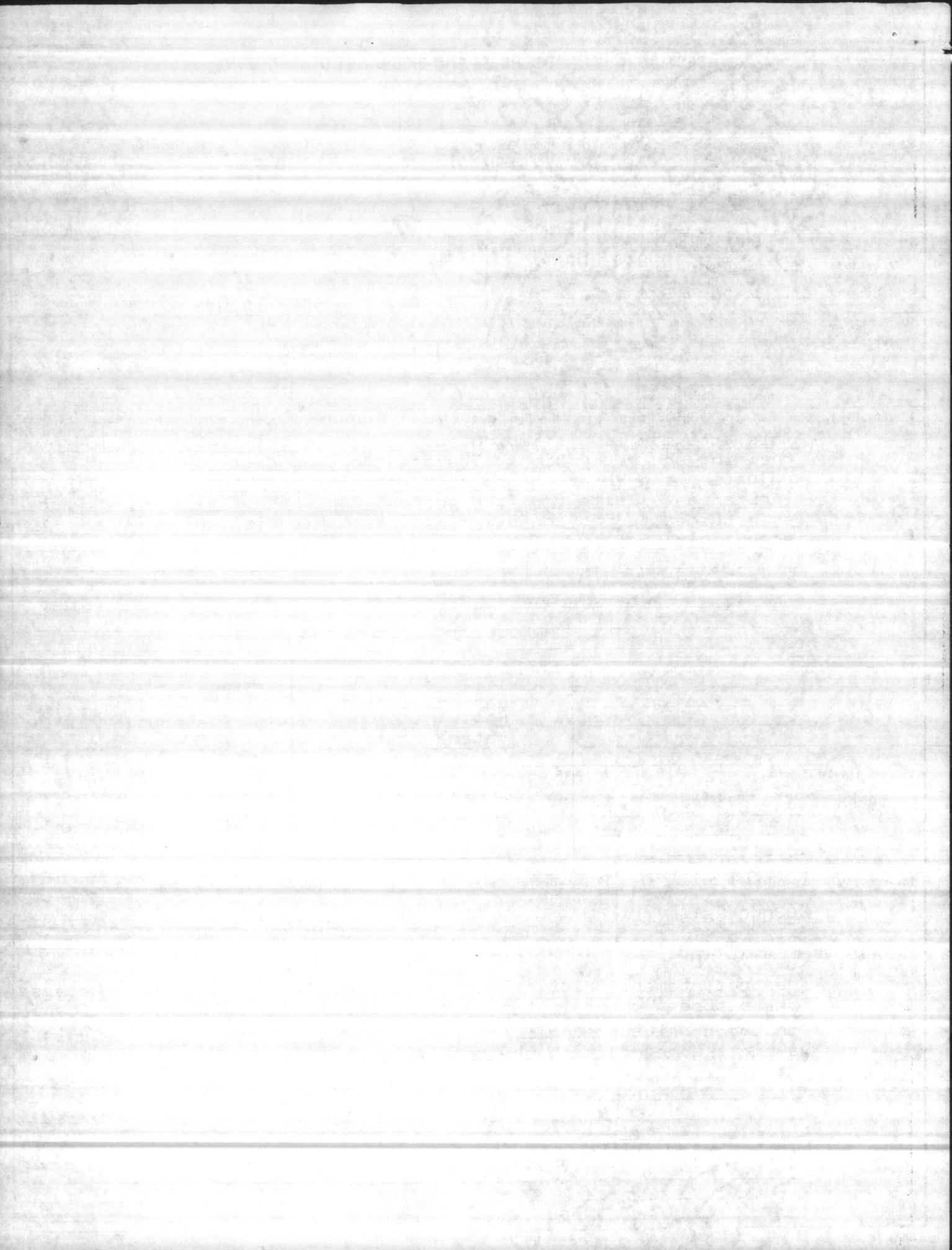
12. Standard industrial classification number. _____	13. Principal product. <u>Water-Swimming Pool {Make-up water}</u>	14. Amount of principal product produced per day. <u>4,000 gal. {Make-up}</u>
--	---	---

15. Principal raw material. <u>Potable water</u>	16. Amount of principal raw material consumed per day. _____	17. Number of batch discharges per day. <u>1 -{BackwashFilter}</u>
--	--	--

18. Average gallons per batch discharge. <u>4,000 gals.</u>	19. Date discharge began. _____ mo _____ day <u>45</u> yr	20. Date discharge will begin. _____ mo _____ day _____ yr
---	--	--

21. Describe waste abatement practices.

Waste abatement practice per se is considered unnecessary because the pathogen count in the waste is probably less than ever found in the receiving stream and the thermal quality of the waste is ambient upon reaching the receiving stream.



22.

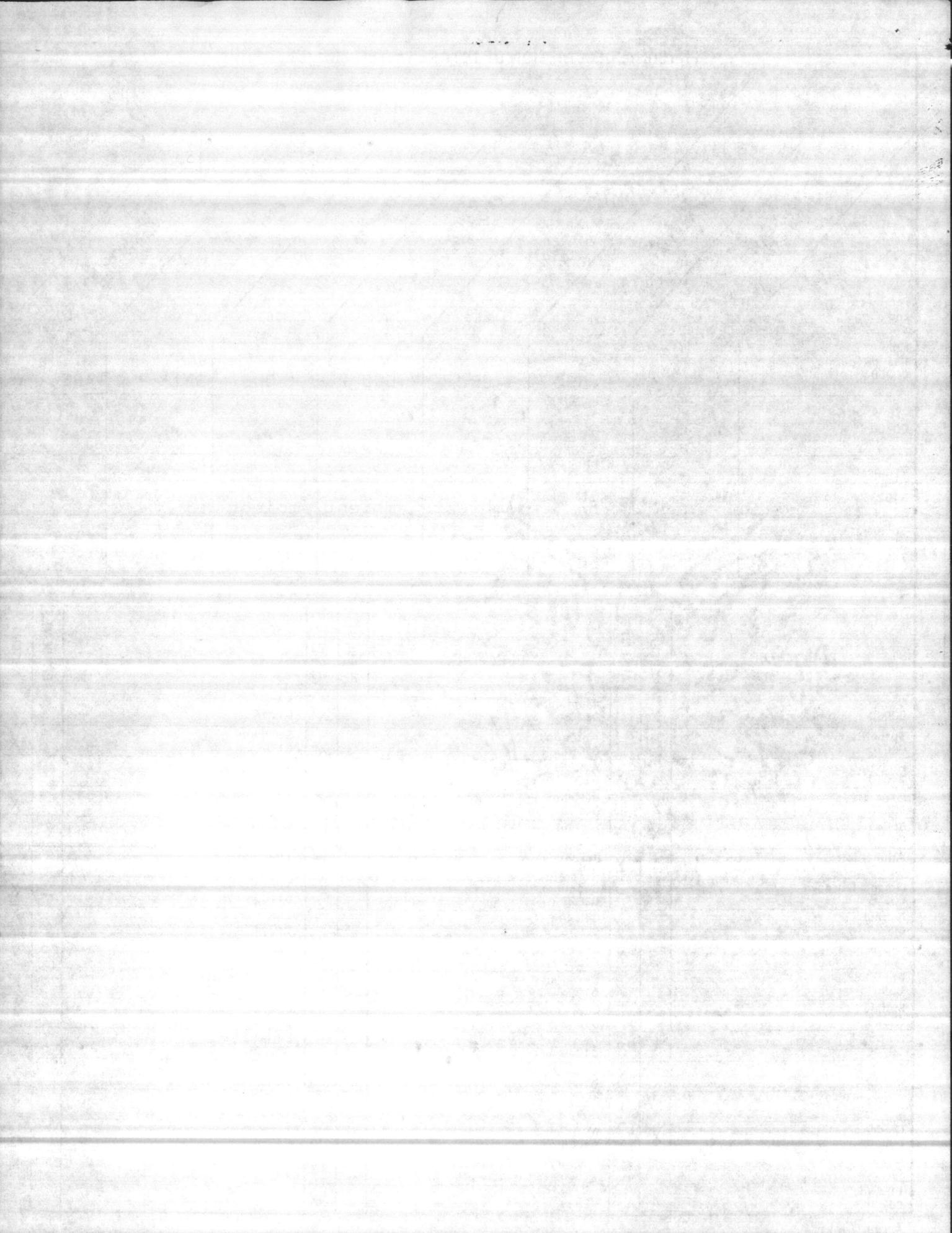
PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Intake	Discharge				(Office use only)		
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
Parameter and (Code)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Flow (Gallons per day) 00056		4,000	4,000	4,000	4,000	DYLY	ABS
pH 00400		7.6	7.7	7.7	7.7	"	
Temperature (Winter) (°F) 74028		80	Ambient	Ambient	Ambient		
Temperature (Summer) (°F) 74027		80	"	"	"		

23.

DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Turbidity 00070	X		Antimony 01097		X	Selenium 01147		X
Radioactivity 74050		X	Arsenic 01002		X	Silver 01077		X
Hardness 00900	X		Beryllium 01012		X	Potassium 00937		X
Solids 00500	X		Barium 01007		X	Sodium 00929	X	
Ammonia 00610		X	Boron 01022		X	Titanium 01152		X
Organic Nitrogen 00605		X	Cadmium 01027		X	Tin 01102		X
Nitrate 00620		X	Calcium 00916	X		Zinc 01092		X
Nitrite 00615		X	Cobalt 01037		X	Algicides 74051		X
Phosphorus 00665		X	Chromium 01034		X	Oil and Grease 00550		X
Sulfate 00945		X	Copper 01042		X	Phenols 32730		X
Sulfide 00745		X	Iron 01045	X		Surfactants 38260		X
Sulfite 00740		X	Lead 01051		X	Chlorinated Hydrocarbons 74052		X
Bromide 71870		X	Magnesium 00927		X	Pesticides 74053		X
Chloride 00940	X		Manganese 01055		X	Fecal Streptococci Bacteria 74054		X
Cyanide 00720		X	Mercury 71900		X	Coliform Bacteria 74056		X
Fluoride 00951	X		Molybdenum 01062		X			





FROM AMS SERIES V742
SHEET 5553 111

SWIMMING POOL WASTE DISCHARGE
in Branch tributary to New River
at Camp Lejeune - Hadnot Point Area (Bldg. 236)
County of Onslow, State North Carolina
Application by Commanding General
Sheet 1 of 1 23 June 1971 Date

#250000

440,000 gal. prod