5. Date: Jun 23 71 (mo day yr)

(Office use only)

6. Check type of application: a. Original [X] b. Revision [ ]

7. Number of original application

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

Courthouse Bay Water Plant (Bldg. BB-190)
(Zeolite Softening Process, supplemented with lime)

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 [X] 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	
Surface water body	
Ground water Deep wells	3.0
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 Filter backwash	0.1
Sanitary system*	0.1
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

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SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is
a. Present [X] b. Proposed now or changed [ ]

2. Implementation schedule [ ]

(Office use only)

Name of corporate boundaries within which the point of discharge is located.

3. State: North Carolina
4. County: Onslow
5. City or Town: Camp Lejeune

6. Discharge Serial No.

State the precise location of the point of discharge.

7. Latitude 34 Degrees; 35 Min 00 Sec.
8. Longitude 77 Degrees; 21 Min; 50 Sec.

9. Name of waterway at the point of discharge.
Ditch tributary to Courthouse Bay

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 [ ]

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 water softening plant providing a potable water supply for the area. The process includes Zeolite cation exchange for hardness removal supplemented by lime treatment and includes iron and hydrogen sulfide removal. Waste from this plant consists of Zeolite regeneration and the backwash of filters for iron and calcium carbonate removal.

12. Standard industrial classification number.

13. Principal product.
Water Treatment and Distribution (Potable Water)

14. Amount of principal product produced per day.
273,000

15. Principal raw material.
Water (Raw)

16. Amount of principal raw material consumed per day.

17. Number of batch discharges per day
1 (Filter backwash)

18. Average gallons per batch discharge.
27,000

19. Date discharge began.
mo ___ day ___ yr 70

20. Date discharge will begin.
mo ___ day ___ yr ___

21. Describe waste abatement practices.

Waste abatement practice per se is considered unnecessary for this plant because: (1) The material is innocuous; (2) It virtually loses its identity prior to reaching the receiving stream; (3) It creates no nuisance in the receiving stream; (4) Its thermal quality is ambient prior to reaching the receiving stream.

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22. **PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE**

Intake	Discharge	(Office use only)
		Discharge Serial No.

Parameter and (Code)	UNTREATED INTAKE WATER (1)	TREATED INTAKE WATER (2)	AVERAGE (DAILY) (3)	MINIMUM (OPERATING YEAR) (4)	MAXIMUM (OPERATING YEAR) (5)	SAMPLE FREQUENCY (6)	CONTINUOUS MONITORING (7)
Flow (Gallons per day) 00056	273,000	None	27,000	27,000	27,000	DYLY	ABS
pH 00400	7.5		11.2	11.2	11.2	"	
Temperature (Winter) (°F) 74028	60		Ambient	Ambient	Ambient		
Temperature (Summer) (°F) 74027	60		Ambient	Ambient	Ambient		

23. **DISCHARGE CONTENTS**

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

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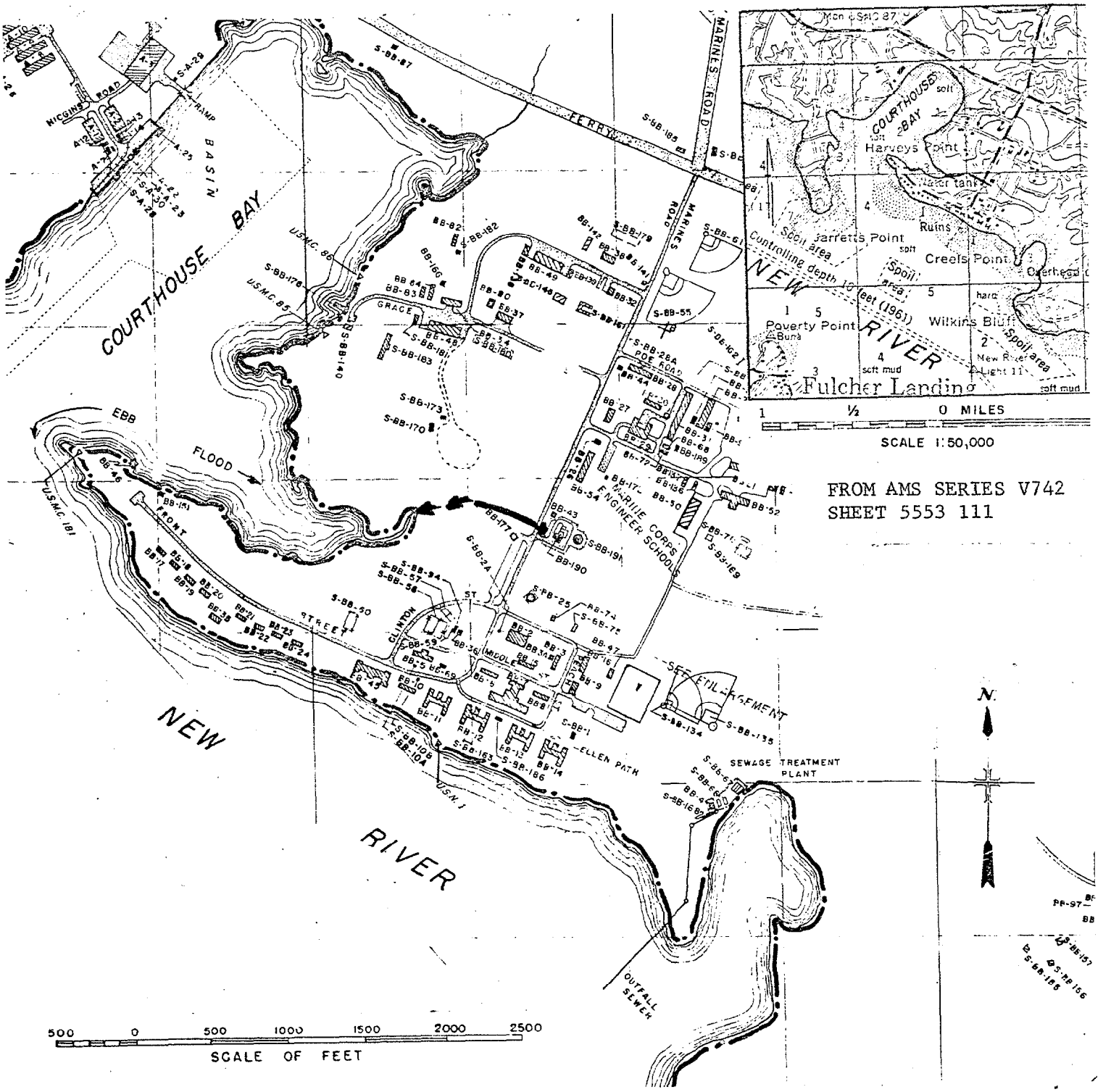

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SHEET 5553 111

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WATER SOFTENING PLANT WASTE DISCHARGE
in Ditch tributary to Courthouse Bay
at Camp Lejeune - Courthouse Bay Area
County of Onslow, State North Carolina
Application by Commanding General
Sheet 1 of 1 23 June 1971 Date