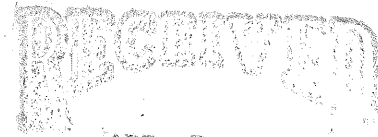


GULF POWER COMPANY

75 NORTH PACE BOULEVARD
POST OFFICE BOX 1151
PENSACOLA, FLORIDA 32520

April 5, 1976

Mr. Gilbert Wallace
Environmental Protection Agency
Suite 300
1421 Peachtree St.
Atlanta, Ga. 30309



Department of Pollution Control
NPDES SECTION

Subject: Scholz Steam Plant NPDES Permit FL0002283:
Chemical Waste Treatment Plan

Dear Mr. Wallace:

Pursuant to the schedule of compliance set out in the above referenced permit, I am herewith enclosing one copy of the "Gulf Power Company Scholz Steam Plant Units 1 and 2 Waste Treatment Plan." This plan represents the "De-tailed Implementation Schedule" requested as the first increment of progress for the chemical waste treatment system.

Should you have any questions concerning the contents of this plan, please do not hesitate to give me a call.

Very truly yours,

Kenneth W. Prest, Jr.

KWPjr:pcf

Attachment

CC: ✓ Fla. Dept. of
Environmental Regulation w/attach.
Robert Dillard w/attach.
G. O. Layman
E. L. Addison

GULF POWER COMPANY
SCHOLZ STEAM PLANT UNITS 1 & 2
WASTE TREATMENT PLAN

March, 1976

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GULF POWER COMPANY

SCHOLZ STEAM PLANT UNITS 1 & 2

WASTE TREATMENT PLAN

March, 1976

1. INTRODUCTION

Gulf Power Company's Scholz Steam Plant is located near Chattahoochee, Florida, on the Apalachicola River approximately three (3) miles below the Jim Woodruff Dam. This plant has two (2) forty (40) megawatt subcritical units. These units are equipped for coal firing only. Fuel oil (No. 2) is maintained on the site for start-up and flame stabilization

Condenser cooling water is withdrawn from the Apalachicola River, passed through the condensers and then returned to the river, via a discharge canal. Water for ash slucing purposes is obtained from the river and returned through the ash pond discharge.

Potable water is supplied from two (2) deep wells located on the plant property. Miscellaneous cooling water, sanitary water, and fire protection and boiler make-up water are obtained from these wells.

Attached Drawing E-PS-4038-15-A depicts the plant layout and is useful in identifying the areas and parameters addressed in this report.

Attached Gulf Power Company Drawings A-3832 and A-3833 are marked to show the waste stream discharges.

Scholz Steam Plant is permitted to operate under N.P.D.E.S. Permit No. FL-0002283 until February 16, 1981.

2. EXISTING WASTE STREAMS

2.1 Sewerage Waste

2.1.1 Potable water is piped to the plant drinking fountains, showers, lavatories, and commodes. Drinking fountain drains, shower drains, and commode drains are routed to an aerobic digestion plant.

2.2 Ash Sluice Water

2.2.1 The ash sluice water for the plant is withdrawn from the common intake tunnels.

2.3 Auxiliary Cooling Water

2.3.1 Cooling water for the air compressor cooler, oil coolers, fan bearings, turbine oil coolers, generator hydrogen coolers, other auxiliaries, and boiler seal water is taken from the river.

2.4 Wash Water (Air Preheater and Precipitator)

2.4.1 Air preheater and precipitator wash water is obtained from the common intake water system directly from the river. This water is only used during a unit outage to remove ash collected on the baskets and plates.

2.5 Floor Drains

2.5.1 Floor drains, boiler blowdown, air preheater wash water, brine regenerant waste, evaporator blowdown and the auxiliary water described below are collected in the building sump.

2.6 Laboratory Drains

2.6.1 All drains from laboratory sinks are piped directly to the building sump.

2.7 Boiler Blowdown

2.7.1 Boiler blowdown is piped directly to the building sump from both Units 1 and 2.

2.8 Site Run-off

2.8.1 All rainfall from the site is concentrated through a standard system of underground sewers.

2.9 Rail Car Unloader Water

2.9.1 The hopper bottom rail cars are self draining, therefore there is not a concentration of water at the unloader.

2.10 Makeup Demineralizer Regenerant Waste

2.10.1 The plant does not have a "conventional" makeup demineralizer. it has a sodium chloride brine regenerated cation resin softener followed by an evaporator. Brine regenerant waste is routed to the building sump via floor drains. Water treatment evaporator blowdown flows directly to the building sump.

2.11 Boiler Chemical Cleaning Wastes

2.11.1 Since both units are small subcritical boilers, boiler cleanings are very infrequent. When cleaning does occur, the wastes will be collected and neutralized in a rubber lined basin.

2.12 Cooling Tower Water Treatment

2.12.1 The plant operates as a once-through unit and does not have cooling towers installed.

2.13 Cooling Tower Blowdown

2.13.1 This plant operates as a once-through unit and does not have cooling towers installed.

2.14 Oily Wastes

2.14.1 Oil storage tanks are surrounded by retaining walls to provide for containment of oil spills.

2.15 Coal Pile Run-off

2.15.1 Water run-off and drainage are collected in the underground yard system.

2.16 Summary

2.16.1 Table I summarizes the existing water and waste management conditions.

3. PRESENT TREATMENT OF WASTE STREAMS

3.1 Sewerage Waste

3.1.1 The plant sewage is treated in a standard package unit that meets all standards of the Department of Health & Rehabilitative Services, Division of Health. The 2,000 gallon per day aerobic digestion plant discharges its effluent through a storm drainage ditch to the discharge canal.

3.2 Ash Sluice Water

3.2.1 All ash sluice water systems are discharged to the ash pond where the ash settles out of the water. The water then flows into the river via standpipe skimmers.

3.3 Auxiliary Cooling Water

3.3.1 Auxiliary cooling water needed for hydrogen coolers, oil coolers, pump bearings, etc., is discharged into the floor drain system and the building sump and then into the discharge canal.

3.4 Wash Water (Air Preheater & Precipitator)

3.4.1 All air preheater wash water used during an outage is discharged to the building sump and then to the discharge canal.

3.4.2 All precipitator wash water used during an outage is discharged to the yard drainage system and then to the discharge canal.

3.5 Floor Drains

3.5.1 All floor drains from the building sump are piped directly to the discharge canal.

3.6 Laboratory Drains

3.6.1 All laboratory drains from the building sump are piped directly to the discharge canal.

3.7 Boiler Blowdown

3.7.1 The drains from the atmospheric flash tank are piped directly to the building sump and then discharged to the discharge canal.

3.8 Site Runoff

3.8.1 No retention or treatment is given normal rainfall runoff through the yard drainage system.

3.9 Rail Car Water

3.9.1 Any water collected in the rail cars drains directly to the sump, is then discharged to the yard drain system, and then to the discharge canal.

3.10 Demineralizer Regenerant Waste

3.10.1 The backwash from the Ion exchanger is piped directly to the building sump and then to the discharge canal.

3.11 Boiler Chemical Cleaning Waste

3.11.1 When a boiler is acid cleaned all waste is collected in the building sump, neutralized, and then discharged to the discharge canal.

3.12 Cooling Tower Water Treatment

3.12.1 This plant does not have cooling towers.

3.13 Cooling Tower Blowdown

3.13.1 This plant does not have cooling towers.

3.14 Oily Wastes

The fill positions on all storage tanks are protected with catch basins that retain any spillage when the tanker hoses are disconnected. The spillage is consolidated with other catchings, and disposed of in the boiler. All oil removed from coal handling tractors is dumped and disposed of in the boilers.

3.15 Coal Pile Drainage

3.15.1 The coal pile drains away from the plant and any drainage is routed to the yard drains.

3.16 Summary

3.16.1 Table I summarized the existing water treatment conditions.

4.0 PROPOSED TREATMENT OF WASTE STREAMS

4.1 Sewerage Waste

None

4.2 Ash Sluice Water

None

4.3 Auxiliary Cooling Water

4.3.1 Replacement pumping equipment will be acquired and all discharges from the building sump will be routed to the ash pond.

4.4 Wash Water

4.4.1 Replacement pumping equipment will be acquired and all discharges from the building sump will be routed to the ash pond.

4.4.2 A new sump will be constructed to collect the wash water and discharge it to the ash pond.

4.5 Floor Drains

4.5.1 Replacement pumping equipment will be acquired and all discharges from the building sump will be routed to the ash pond.

4.6 Laboratory Drains

4.6.1 Replacement pumping equipment will be acquired and all discharges from the building sump will be routed to the ash pond.

4.7 Boiler Blowdown

4.7.1 Replacement pumping equipment will be acquired and all discharges from the building sump will be routed to the ash pond.

4.8 Site Run-off

None

4.9 Rail Car Water

None

4.10 Demineralizer Regenerant Water

4.10.1 Replacement pumping equipment will be acquired and all discharges from the building sump will be routed to the ash pond.

4.11 Boiler Chemical Cleaning Waste

4.11.1 A lined retention pond will be constructed to accumulate the wash water for treatment by a portable chemical cleaning facility prior to discharge into the ash pond.

4.12 Cooling Tower Water Treatment

None

4.13 Cooling Tower Blowdown

None

4.14 Oily Wastes

None

4.15 Coal Pile Drainage

4.15.1 A collection ditch will be constructed around the coal storage area and any runoff pumped into the ash pond.

4.16 Summary

4.16.1 Table II summarizes the proposed waste treatment conditions.

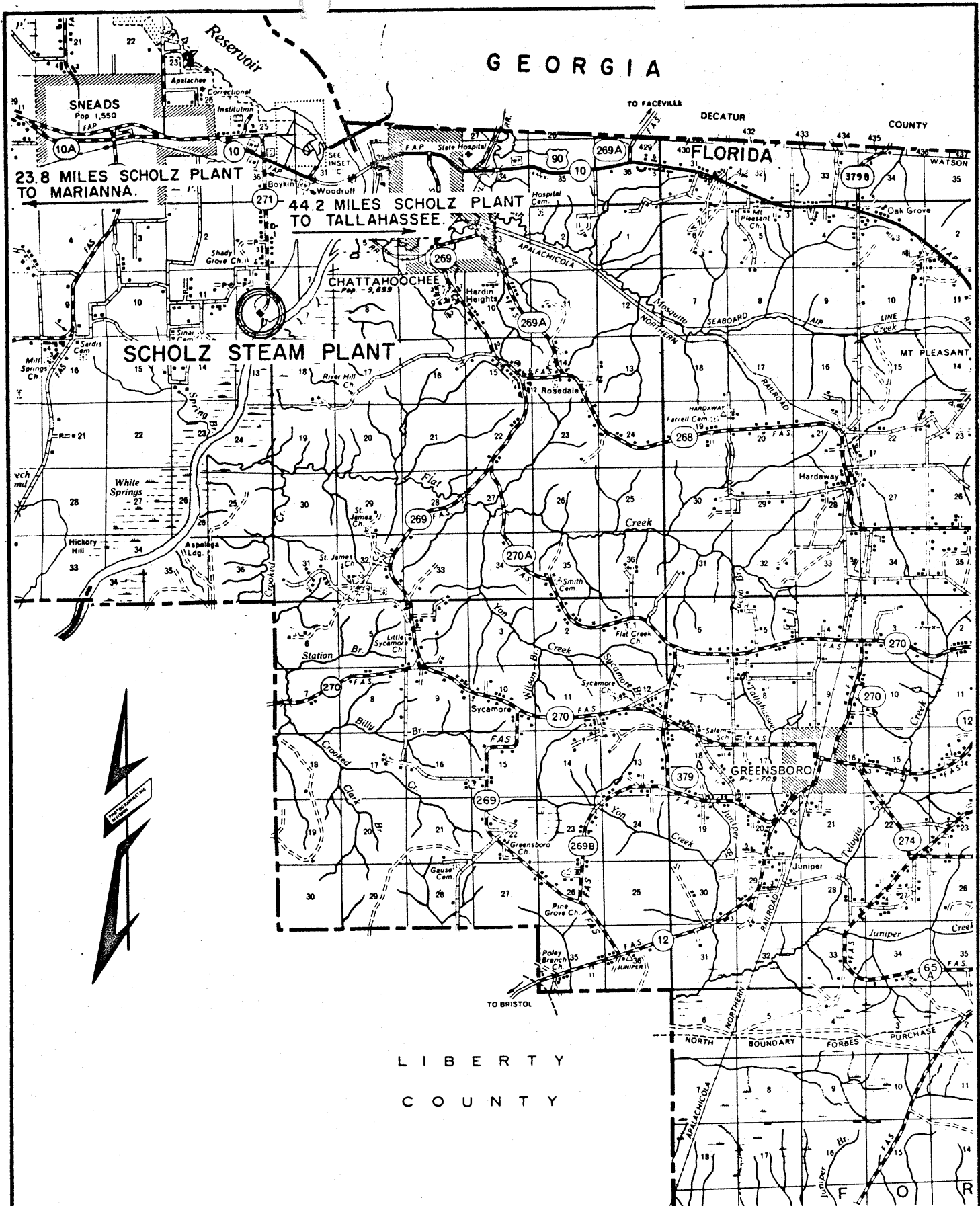
TABLE I
EXISTING WATER AND WASTE MANAGEMENT CONDITIONS

ITEM	WATER SOURCE				DISCHARGE POINT					
	Rain-fall	River Intake Canal	River Dis-charge Canal	Wells	River Dis-charge Canal	Aerobic Diges-tion Plant	Ash Pond	Build-ing Sump	Yard Drains	Contain-ment Pond
Condenser Cooling Water		x			x					
Fire Protection Water				x					x	
Potable Water				x		x				
Aerobic Digestion Plant				x	x					
Makeup Demineralizer Wastes				x				x		
Building Sump		x		x	x					
Auxiliary Water		x			x			x		
Ash Sluice Water			x				x			
Precipitator Wash Water		x							x	
Coal Pile Runoff	x				x				x	
Floor Drains		x		x				x		
Laboratory Drains				x				x		
Boiler Blowdown				x				x		
Site Runoff	x				x					
Rail Car Unloader	x				x					

TABLE II
PROPOSED WATER AND WASTE MANAGEMENT PLAN

ITEM	WATER SOURCE				DISCHARGE POINT					
	Rain-fall	River Intake Canal	River Dis-charge Canal	Wells	River Dis-charge Canal	Aerobic Diges-tion Plant	Ash Pond	Build-ing Sump	Yard Drains	Contain-ment Pond
Condenser Cooling Water		x			x					
Fire Protection Water				x					x	
Potable Water				x		x				
Aerobic Digestion Plant				x	x					
Makeup Demineralizer Wastes				x			0 ←	- x		
Building Sump		x		x	x - - - - -	→ 0				
Auxiliary Water		x			x - - - - -	→ 0				
Ash Sluice Water			x				x			
Precipitator Wash Water				x			0 ←	- - - - -	- x	
Coal Pile Runoff	x						0 ←	- - - - -	- x	
Floor Drains		x		x				x		
Laboratory Drains				x				x		
Boiler Blowdown				x				x		
Site Runoff	x				x					
Rail Car Unloader	x				x					

GULF POWER COMPANY



DR.

TR.

DATE 12-13-72

SUBJECT

SCHOLZ STEAM PLANT

DETAIL

SITE LOCATION

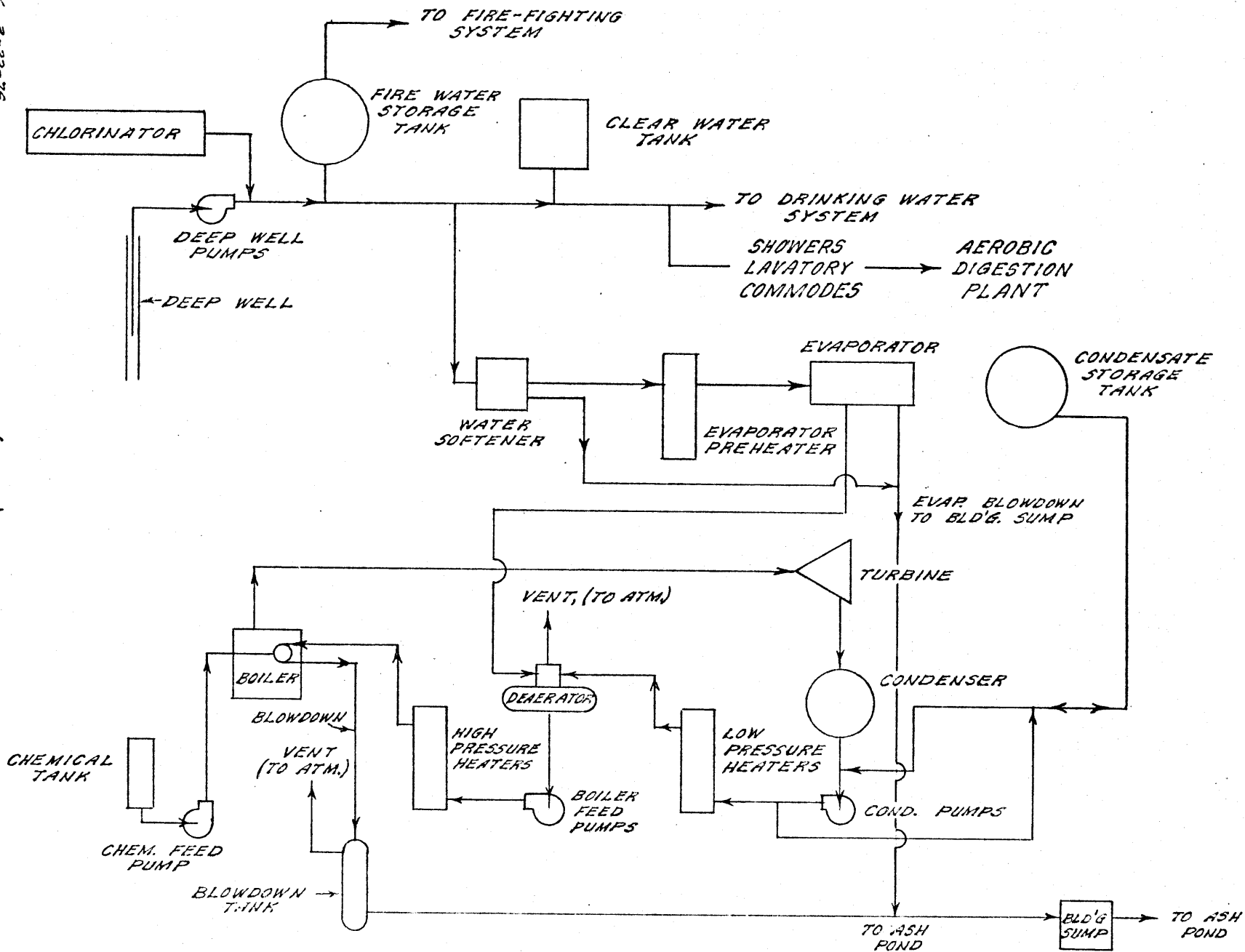
SCALE 1/2" = 1 MILE

SH

OF

SHEETS

A-3662



REV. 3-22-76
REV. 2-17-75

(5.3)

DR. A.E.T.
TR. A.E.T.
DATE 8-7-74

SUBJECT: SCHOOL STEAM PLANT
DETAIL: CLEAR WATER, STEAM & FEEDWATER CIRCLES
SCALE: NONE
SH 1 OF 1 SHEETS
A-3832

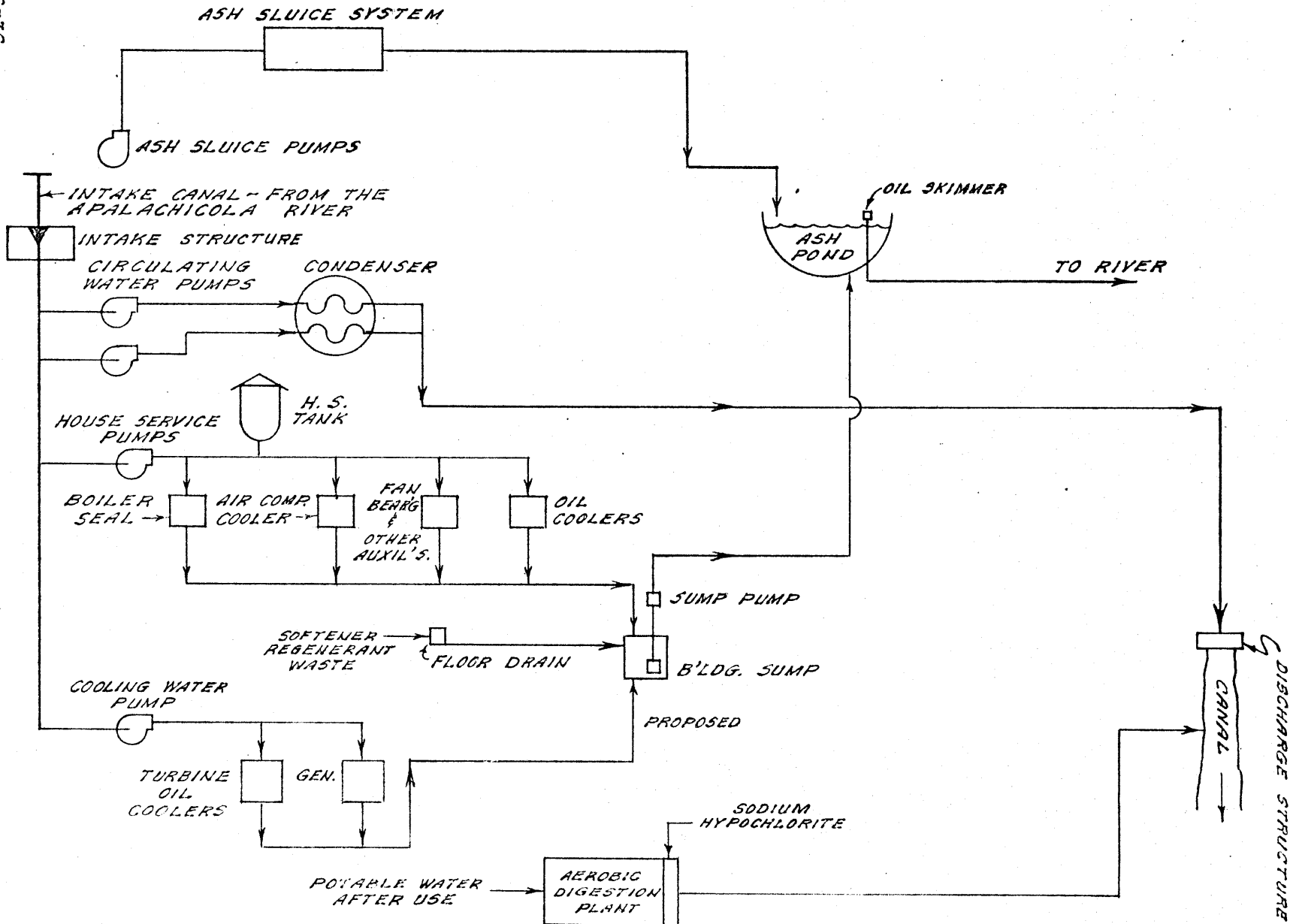
GULF POWER COMPANY

REV. 3-26-76
REV. 3-22-76
REV. 8-30-74

DR. _____
TR. H.E.N.
DATE 8-7-74

SUBJECT: SCHOLZ STEAM PLANT
DETAIL: PROPOSED RIVER WATER CYCLE - UNITS 1 & 2.
SCALE: NONE SH 1 OF 1 SHEETS A-3833

(5.4)



Construction Schedule

BUILDING SUMP

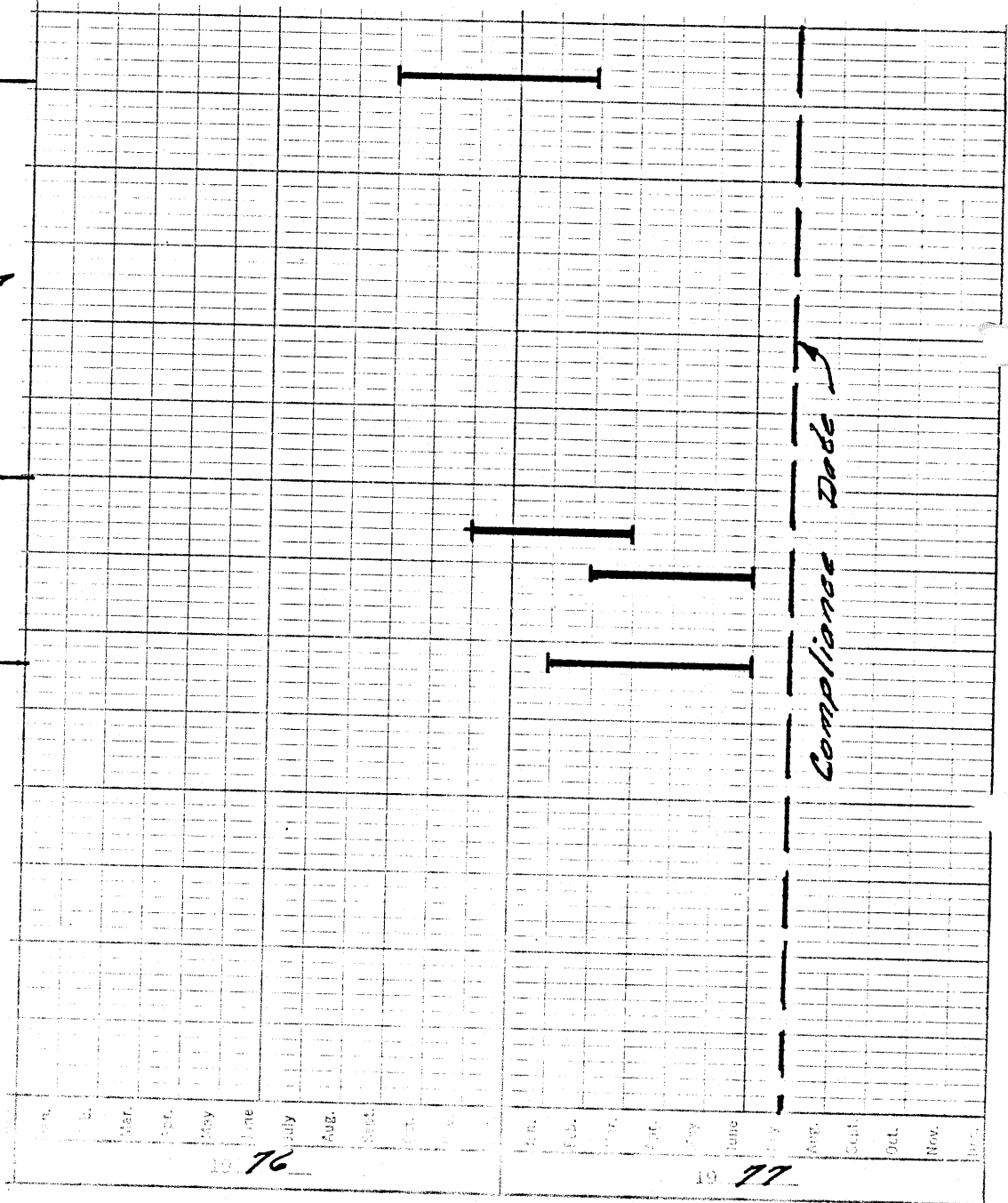
- 4.3.1 Auxiliary Cooling Water
- 4.4.1 Wash Water
- 4.5.1 Floor Drains
- 4.6.1 Laboratory
- 4.7.1 Boiler Blowdown
- 4.10.1 Regenerative Waste

BOILER CHEMICAL CLEANING

- 4.11.1 Pond Float

COAL PILE DRAINAGE

Compliance Date



GULF POWER COMPANY

SUBJECT SCHOLZ PLANT

DETAIL W.R.D.S. FL-0003353

DR. 504

TR. 105

CK. 176

APP. 176

DATE 3/76

SUPERSEDES

SCALE

SH

OF

SHEETS

A-