Georgia Department of Natural Resources
205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
Harold F. Reheis, Assistant Director
Environmental Protection Division

December 29, 1986

Mr. W. R. Woodall, Jr.
Manager
Environmental Affairs
Georgia Power Company
P. O. Box 4545
Atlanta, Georgia 30302

Re: Plant Scherer
NPDES Permit No. GA 0035564

Dear Mr. Woodall:

We have received your December 2, 1986 letter regarding the November 4, 1986 EPA comment letter. We have also discussed our approach on the next draft permit with Mr. George Guill of your staff on December 12, 1986.

It appears that an acceptable final permit can be written if Georgia Power Company can avoid simultaneous discharge of chlorine in cooling tower blowdown during normal biofouling control. Mr. Guill indicated that this may be possible, and if so, we request that your May 5, 1986 discussion of chlorination practices be revised accordingly.

The enclosed draft permit has been prepared in conformance with the requirements of alternative No. 1 in EPA's November 4, 1986 letter. This permit will allow asiatic clam control if chlorine discharges are minimized. Dechlorination will not be considered until water quality impacts have been investigated and appropriate chlorine discharge levels determined.

Please review the draft and respond by January 19, 1987.

Sincerely,

Harold F. Reheis

Harold F. Reheis, P.E.
Assistant Director

HFR:thk
Enclosure

cc: Mr. George Guill (w/enclosure)

cc: U. S. Environmental Protection Agency

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

OK

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01 - Detention Pond (I Pond) pFinal Discharge to Berry Creek; 01D - I Pond Bottom Drain.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	-	90	1/Month	Grab	Final Discharge or Bottom Drain
Total Residual Chlorine (TRC)	-	-	-	-	3/day(1)	Grab	Final Discharge or Bottom Drain

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample at the final discharge to Berry Creek or at the bottom drain when discharging.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring and reporting of TRC is required only during continuous service water chlorination for controlling asiatic clams.

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STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

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2. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 01A - Cooling Tower Blowdown for Units 1, 2, 3 and 4.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/l) Daily Max.	Avg.	Inst.Max.	Monitoring Requirements Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-
Free Available Chlorine (FAC)	-	0.2	0.5	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Blowdown Line
TRC Time (minutes/day/unit)	120	-	-	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)	-	-	-	1/Week	Multiple Grabs	Service Water
Total Chromium	0.2	-	-	1/Quarter	Grab	Blowdown Line
Total Zinc	1.0	-	-	1/Quarter	Grab	Blowdown Line

Good

Caused in III. B.5 of 21 p19

from each individual

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Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken ~~before the~~ cooling tower blowdown combines with waste streams from other sources.

prior to

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& monitoring requirements

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All numerical discharge limitations apply to the individual cooling tower blowdown from each generating unit. The limitations of 0.2/0.5 mg/l of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III, B.4., 5., and 6., beginning on page 19.

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OK

OK

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~~Submittal of Report(s)~~

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

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7. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 03 - Service Water Final Discharge to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Sample Frequency	Sample Type	Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Temperature	-	-	-	-	1/Week	Grab	(1)
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Grab	Final Discharge

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Temperature will be monitored and reported for the plant intake and the final discharge. The difference ("ΔT") between the intake and discharge temperature shall be calculated and entered on the monitoring report.

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8. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 04 and 05 - Units 1 and 2 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/l)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling. There shall be no discharge of floating solids or visible foam in other than trace amounts.

TSS, O & G, and pH are required for basin cleaning waste discharges. FAC, TRC, chromium, zinc, and pH are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study. TRC Time ?

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before the cooling tower overflow combines with waste streams from other sources.

monitoring

All numerical discharge limitations apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/l of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). ?? Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

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9. During the period beginning effective date and lasting through April 30, 1992, the permittee is authorized to discharge from outfall(s) serial number(s) 06 and 07 - Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Units(Specify) (mg/l)				Monitoring Requirements		
	Avg.	Inst.Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC)	0.2	0.5	-	-	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)	-	-	-	-	1/Week	Multiple Grabs	Overflow
TRC Time (minutes/day/unit)	-	-	-	120	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

TSS, O & G, and pH are required for basin cleaning waste discharges. FAC, TRC, chromium, zinc, and pH are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

See p 9/21

Multiple grab samples are to be collected on 15 minute intervals during periods of FAC and TRC discharges attributable to cooling tower/condenser chlorination. Intervals are to be 3/day during FAC and TRC discharges attributable to continuous service water chlorination. Samples are to be taken before the cooling tower overflow combines with waste streams from other sources.

All numerical discharge limitations apply to the individual cooling tower overflow from each generating unit. The limitations of 0.2/0.5 mg/l of FAC apply to FAC discharge attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination). Time of discharge of TRC attributable to cooling tower/condenser chlorination is limited to 2 hours/day/unit. Simultaneous discharge of TRC attributable to cooling tower/condenser chlorination is prohibited. Also, see Part III. B. 4., 5., and 6.

5. In accordance with 40 CFR 423.11(k), the free available chlorine (FAC) average means the average over any individual chlorine release period of 2 hours per day per unit. The FAC maximum is the instantaneous maximum which may occur at any time. Further, the permittee will develop a system for monitoring and recording total time of FAC and TRC discharges. The results shall be reported in a suitably concise form beginning with the first scheduled Operation Monitoring Report (OMR) and continuing on each OMR thereafter.

6. In accordance with 40 CFR 423.13(d)(3), the permittee shall certify every two years in the flow characterization study that no priority pollutant other than chromium or zinc is above detectable limits in outfalls 01A, 04, 05, 06, and 07 (cooling tower blowdowns or overflows).

7. In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled by this permit shall not exceed the specified limitations for that source.

8. The Director may modify any effluent limitation upon request of the permittee if such limitation is covered by an approved variance or by an amendment to the Federal Water Pollution Control Act.

9. The permittee shall determine the flow of the various waste streams and submit this determination to the Director once every two years.

10. All sewage treatment plants (STP) must be properly operated and maintained. This applies to 02A Main STP, 02B Coal Handling STP, 02C Unit 1 Temporary STP, and 02D Unit 2 Temporary STP.

Should be expanded but

11. Every two years, the permittee shall review the water treatment chemicals other than chlorine discharged to State waters. This includes, but is not limited to microbiocides, corrosion inhibitors, and dispersants. These chemicals shall be used and disposed of in accordance with the manufacturers' instructions unless other requirements are imposed by EPD.

Good →

As part of the flow characterization study of Item 13. below, the permittee shall submit to EPD a current inventory of all chemicals discharged during the previous twenty-four months.

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Summary of NPDES Permit Rationale

Name Georgia Power Company - Plant Scherer NPDES No. GA 0035564

Location Monroe County Major Discharge _____

Minor Discharge X Date 12/29/86 Prepared by T. E. Hopkins

Draft permit is first issuance _____ reissuance with no modifications from previous permit _____ modification of existing permit X.

Discharge is industrial X municipal _____ privately owned (domestic wastewater only) _____. If industrial, point source category is 423 Steam Electric Power Generating subcategory is N/A production level is 3,272 megawatts, SIC code is 4911.

Facility located on stream segment that is and the basis for derivation of limitation is:

_____ Stream water quality limited
- _____ Based on water quality model
- _____ Based on instream calculation at 7 day, 10 year low flow

X Stream effluent limited
- X Based on promulgated guidelines
- _____ Based on plant's demonstrated performance
- _____ Based on demonstrated technology

Discussion:

See Following Pages:

GEORGIA POWER - PLANT SCHERER
SUMMARY OF NPDES PERMIT RATIONALE
DISCUSSION
GA 0035564

This permit is prepared in response to USEPA Region IV's January 15, 1986 letter and a revised partial Form 2C submitted by Georgia Power on May 5, 1986. Units 3 and 4 are included as existing sources. See also EPA's 7/29/86 and 11/4/86 letters and EPD's 9/9/86 and 12/29/86 responses.

01 I Pond Final Discharge and 01D I Pond Bottom Drain to Berry Creek: A daily max. TSS of 90 mg/l should be adequate to protect State waters and begin a track record at this outfall. A pH of 6.0-9.0 is required by 40 CFR 423. TRC monitoring is added to determine chlorine discharges during continuous service water chlorination for asiatic clam control.

01A Cooling Tower Blowdown for Units 1, 2, 3, 4: These are 40 CFR 423 regulated waste streams except under certain conditions as discussed. All requirements are derived directly from the Federal regulations. The "floating solids/visible foam" statement is deleted from this and other internal waste stream permit pages. Blowdown losses are made up from the service water system which is to be continuously chlorinated to control asiatic clams. See Part III. B. 4., Special Requirements. During clam control, chlorine will be discharged simultaneously from more than one unit and for more than 2 hours/day/unit. Allowable chlorine discharge concentration limits under these conditions is beyond the scope of the regulations. It is our best professional judgement (BPJ) that these chlorine (FAC) concentrations will not significantly exceed 0.2 mg/l average, 0.5 mg/l maximum at 01A. Further, the 01A waste stream passes through I-Pond (outfall 01) where chlorine dissipation will occur prior to entering the receiving stream. Therefore, specific numerical limits are not being established at this time. However, the chlorine minimization requirements of Part III. B. 4. and the permit modification provision of Part II. B. 8. (which is to be implemented as indicated in the 03 discussion below) will adequately protect Berry Creek. Finally, priority pollutant certification will be required every two years in the flow characterization study.

01B Ash Transport Water (includes 02H, Wastewater Basin Low Volume Wastes): On May 5, 1986, Georgia Power submitted information which enables an ash pond volume test calculation per the August 22, 1985 USEPA Guidance Memo. The calculation (attached) indicates that dilution does not occur and the 40 CFR 423 limitations can be applied without reduction.

02J Settling Pond Emergency Overflow to Lake Juliette: This may be considered a discharge of ash transport water to a water of the U.S. The applicable limits for TSS, Oil and Grease, and pH are taken from 40 CFR 423.

02K Wastewater Basin Emergency Overflow: This may be considered a discharge of low volume wastewater to Lake Juliette, a water of the U.S. Therefore, TSS, O&G, and pH limits are taken from 40 CFR 423. This basin serves Units 1 and 2.

02L Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes): This basin serves Units 3 and 4. Permit requirements are identical to 02K above.

03 Service Water Final Discharge to Lake Juliette: This discharge is analogous to once-through, non-contact cooling water. The pollutants which are to be regulated are temperature and chlorine. The discharge consists of miscellaneous cooling water flows and pump bleedoff, none of which pass through the main condensers. This waste stream is not covered in 40 CFR 423, so effluent limits are based on BPJ. Georgia Power expects no significant rise in temperature and will verify by measurements in the lake. This assumption is consistent with our experience with other once-through, non-contact, non-condenser cooling waters. Therefore, periodic monitoring without limits is adequate. After sufficient monitoring data are obtained, we may add limits if W.Q. standards are being violated. Chlorine from control of normal biofouling and asiatic clams will be discharged at 03. Therefore, TRC monitoring will be imposed. This monitoring will document existing control of chlorination and discourage over-use. Reductions in TRC discharge will be required if EPD documents TRC toxicity in the receiving water. This approach is consistent with our developing statewide strategy for controlling and abating TRC toxicity.

04 and 05 Unit 1 and Unit 2 Cooling Tower Basin Overflows to Lake Juliette, including Basin Cleaning Wastes: Cooling tower basin overflows are analogous to cooling tower blowdowns, so limits for FAC, TRC, chrome and zinc are imposed from 40 CFR 423. Also, see above discussion in 01A regarding chlorine discharges during asiatic clam control. Similar requirements apply to 04, 05, 06, and 07. Basin cleaning wastes are low volume wastes, so the 423 limits for TSS and O&G are used. These waste streams discharge directly to a water of the U.S., requiring pH limitations per Part 423. A compliance inspection verified that stop log leakage is insignificant. No monitoring is required and periodic review in the bi-annual flow charac. study is adequate to control leakage. Priority pollutant certification is allowed as in the provisions of 01A Cooling Tower Blowdown.

06 and 07 Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond): Limitations for these waste streams are written as 04 and 05, except that "I Pond" is not a water of the U.S. Therefore, pH monitoring is not required. The pH of the final discharge is limited at 01/01D, the "I Pond" outfalls.

Special Requirements See Part III. B

1. PCB's: The statement from 423 is repeated.

2. & 3. Metal Cleaning Wastes: The BPT/BAT provisions are incorporated from 423. These wastes are not discharged to a U.S. water. Therefore, pH is not limited except at the final plant discharge.

4. FAC and TRC time and simultaneous discharge provisions: Part 413 is cited. The company has demonstrated the need to simultaneously discharge chlorine for more than 2 hours/day/unit during service water chlorination for clam control. The BAT numerical limitations for FAC in cooling tower blowdown (01A) do not apply under these circumstances. However, increased monitoring and chlorine minimization will protect water quality, as contemplated for verification by EPD toxics monitoring. The company will study and implement the most feasible chlorine minimization early in the life of the permit. Further, the company must develop a new format for reporting time of FAC and TRC discharges.

5. The FAC average and instantaneous maximum are specified here per 40 CFR 423.

6. Priority pollutants shall be certified absent in all cooling tower blowdowns/overflows every 2 years.

7. Combined discharges: Part 423 is cited re mass-based limits.

8. Modifications: Expands Part II.B.4. to specify that the company may request changes to limits.

9. Flow characterization study: Studies are to be done every two years.

10. Sewage treatment plants: All STP's (02A, 02B, 02C, 02D) are to be operated properly. These plants do not discharge directly to a U.S. water.

11. Water treatment chemicals other than chlorine: These are to be inventoried every two years.

12. Use of alternate report forms may be allowed.

13. Periodic reports to be included with flow charac. studies:

    a) Stop log leakage

    b) Metal cleaning

    c) Flows

    d) Water treatment chemicals

    e) C.T. blowdown certification

6/19/86 TEH

Plant Scherer
Ash Transport Water Effluent Limitations
Outfall 01B

Available Information

02H	Low Volume Wastes	8200 gpm	=	11.81 MGD
02	Ash Transport Water	36,090 gpm (net)	=	51.97
02E	Coal Pile Runoff	2,500 gpm	=	3.6
02C, D	STP's	34 gpm	≈	0
				67.38 MGD

Ash Pond Area = Total Runoff Area = 490 acres

10 year 24-hour storm (10Y24H) = 5.8 inches
Annual rainfall = 44.77 inches

Calculations

Runoff from 10Y24H storm at a runoff coefficient of 1.0

= (490 acres)(5.8 inches)(1 ft/12 in)(43560 ft²/acre)(7.48 gal/ft³)

= 77.2 MG

Total ash pond volume for use of alternate approach

= 144.6 MG

= 444 A-FT.

6/19/86 TEH

Case I

Ash pond water surface area (acres)	=	490
Average water depth when new	=	32.65 ft.
Subtract 2 units × 160 A-ft/year × 4 years ÷ 490 acres	=	− 2.61 ft.
Average water depth available	=	30.0 ft.
Available volume	=	14,700 A-ft

Since the pond volume exceeds the necessary storage volume of 444 A-ft. required to use the alternate approach, only dry weather flows need to be used in calculating effluent limitations.

Sources	Flow (MGD)	Daily Average Limitations (mg/l)		Daily Maximum Limitations (mg/l)	
		TSS	O&G	TSS	O&G
Low Volume Wastes	11.81	30	15	100	20
Ash Transport Water	51.97	30	15	100	20
Flow Weighted Conc.	(63.78)	30	15	100	20
Effluent Limitations for 01B		30	15	100	20

Tom Hopkins
P 3 CTBD

TRC

Exist Permit → 2 Units to 4

Corbicula Control is new

11/82 Guidline BAT

Can we Go beyond 11/85 (since corbicula control is new) to waive limits in permit for 1 yr ±
Vs Admin Order ??

After one year period there are to be

12/29/86

1. Our 11/4/86 Letter

2. Implemented Alt. # 1

3. Ga Pwr will sequentially discha tower/condenser chlorine rather than simultaneous.

4. Ga Pwr to revise discussion of Cl_2 practices

5. Request that
   (a) We review draft w/i confines of specific objection.

?7. (b) No reason to raise additional

   (c) Alt #1 allows adherence w/ regulations w/o arbitrary inst of dechlor.

   (d) Toxicity reduction can be instituted gradually based on demo of need

6. Outfall 03. Part II B.8 will allow adequate control (tox.) & nothing needed additionally

7. No need for further r v

Letter to Woodall 12/29

1. "If Cl_2 discharges are minimized"
2. "Dechlor will not be considered until WQ impacts..."

Charles Kaplan

To: B.BARRETT (EPA9440)
From: ITD/OWRS (EPA4361) Posted: Tue 18-Nov-86 15:53 EST Sys 63 (47)
Subject: Message for Charles Kaplan

*** DRAFT *** DRAFT *** DRAFT ***

SUBJECT: Georgia Power, Scherer Plant
Chlorine Limitations
Your Memorandum of November 5, 1986

FROM: Dennis Ruddy (WH-552)
Project Manager, Steam Electric
Industrial Technology Division

TO: Charles H. Kaplan, P.E. (4WM-FP)
National Expert, Steam Electric
Region IV

I concur with all of your findings regarding chlorine limitations for tower/condenser cooling waters based on review of Georgia EPD's draft permit of September 16, 1986. Your basis for objections to the draft permit in your letter of November 4, 1986 to EPD are consistent with the requirements of 40 CFR 423.

As we discussed, suggested alternatives #2 and #3 outlined on page 2 of your 11/4/86 letter to EPD are not in accord with the requirements of 40 CFR 423. However, as possible results of any F.D.F. variance process, they do represent sound technical approaches to establishing BAT limitations.

B. SPECIAL REQUIREMENTS

1. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

2. Any metal cleaning wastes generated will be contained for further treatment or disposal in a manner to permit compliance at time of discharge with requirements listed below. This applies to any preoperational chemical cleaning of metal process equipment also. The treatment and disposal procedures shall be discussed in the bi-annual flow characterization study.

3. The quantity of pollutants discharged in metal cleaning waste shall not exceed the quantity determined by multiplying the flow of metal cleaning wastes times the concentrations listed below. All effluent characteristics shall be monitored 1/week by grab sampling when a discharge is occurring.

Effluent Characteristic	Discharge Limitation (mg/l)	
	Daily Average	Daily Maximum
Total Suspended Solids	30	100
Oil and Grease	15	20
Copper	1.0	1.0
Iron	1.0	1.0

4. Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Director that the units in a particular location cannot operate at or below this level of chlorination. The permittee has demonstrated the need to continuously chlorinate the service water system to control asiatic clams. The service water will be chlorinated periodically from April through October, five days per month for 24 hours per day at an initial level of 1.0 mg/l FAC. This chlorination practice will result occasionally in the discharge of FAC or TRC from each cooling tower simultaneously and for more than 2 hours per day. The permittee must reduce the chlorine discharge if possible and shall perform a study to determine the minimum practicable chlorine levels and periods of continuous chlorination for the service water system to adequately control asiatic clams. A plan of study must be submitted to the EPD within 90 days after the effective date of the permit and implemented upon approval.

OK

OK

OK

OK

?? OK??

Can we be involved Due to need for info. for similar sites?

- will it include reporting requirements??

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Summary of NPDES Permit Rationale

Name Georgia Power Company - Plant Scherer NPDES No. GA0035564

Location Monroe County Major Discharge _____

Minor Discharge ✓ Date ~~6/19/86~~ 9/9/86 Prepared by J. E. Hopkins

Draft permit is first issuance _____ reissuance with no modifications from previous permit _____ modification of existing permit ✓.

Discharge is industrial ✓ municipal _____ privately owned (domestic wastewater only) _____. If industrial, point source category is 423 Steam Electric Power Generating subcategory is _____ production level is 3,272 megawatts.

Facility located on stream segment that is and the basis for derivation of limitation is:

_____ Stream water quality limited
- _____ Based on water quality model
- _____ Based on instream calculation at 7 day, 10 year low flow

✓ Stream effluent limited
- ✓ Based on promulgated guidelines
- _____ Based on plant's demonstrated performance
- _____ Based on demonstrated technology

Discussion:

This permit is prepared in response to USEPA Region IV's January 15, 1986 letter and a revised partial Form 2C submitted by Georgia Power on May 5, 1986. Units 3 and 4 are included as existing sources. See also EPA's 7/29/86 letter and our 9/9/86 response. 01 I-Pond Final Discharge and 01D I-Pond Bottom Drain to Berry Creek. A daily max. TSS of 90 mg/l should be adequate to protect state waters and begin a track record at this outfall.

01 & 01D cont. - a pH of 6.0 - 9.0 is required by 40CFR423.

01A Cooling Tower Blowdown for Units 1, 2, 3, 4. These are 40CFR423 regulated waste streams. All requirements are derived directly from the Federal regulations. Priority pollutant certification will be required every two years in the flow characterization study.

01B Ash Transport Water (includes 02H, Wastewater Basin Low Volume Wastes). On May 5, 1986, Georgia Power submitted information which enables an ash pond volume test calculation per the August 22, 1985 USEPA Guidance Memo. The calculation (attached) indicates that dilution does not occur and the 40CFR423 limitations can be applied without modification.

02J Settling Pond Emergency Overflow to Lake Juliette. This may be considered a discharge of ash transport water to a water of the U.S. The applicable limits for TSS, Oil and Grease, and pH are taken from 40CFR423.

02K Wastewater Basin Emergency Overflow. This may be considered a discharge of low volume wastewater to Lake Juliette, a water of the U.S.

02K con't. Therefore, TSS, O&G, and pH limits are taken from 40 CFR 423. This basin serves Units 1 and 2.

02L Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes). This basin serves Units 3 and 4. Permit requirements are identical to 02K above.

03 Service Water Final Discharge to Lake Juliette. This discharge is analagous to once-through, non-contact cooling water. The pollutants which are to be regulated are temperature and chlorine. The discharge consists of miscellaneous cooling water flows and pump bleedoff, none of which pass through the main condensers. This waste stream is not covered in 40 CFR 423, so effluent limits are based on BPJ. Georgia Power expects no significant rise in temperature and will verify by measurements in the lake. This assumption is consistent with our experience with other once-through, non-contact, non-condenser cooling waters. Therefore, periodic monitoring without limits should be adequate. After sufficient monitoring data are obtained, we may add limits if W.Q. standards are

03 con't. being violated. Regarding chlorine, a TRC ~~limit of 0.5 mg/l~~ monitoring will be imposed. This ~~limit~~ monitoring will ~~require~~ document existing control of chlorination and discourage over-use. ~~Additional~~ Reductions in TRC discharge will be required after EPD has documented TRC toxicity in the receiving water. This approach is consistent with our developing state-wide strategy for controlling and abating TRC toxicity.

04 and 05 Unit 1 and Unit 2 Cooling Tower Basin Overflows to Lake Juliette, including Basin Cleaning Wastes: Cooling tower basin overflows are analagous to cooling tower blowdowns, so limits for FAC, TRC, chrome and zinc are imposed from 40CFR 423. Basin cleaning wastes are low volume wastes, so the 423 limits for TSS and O&G are used. These waste streams discharge directly to a water of the U.S., requiring pH limitations per Part 423. A compliance inspection verified that stop log leakage is insignificant. No monitoring is required and periodic review in the bi-annual flow charac. study is adequate to control leakage. Priority pollutant certification is allowed as in the provisions of 01A Cooling Tower Blowdown.

06 and 07 Units 3 and 4 Cooling Tower Basin Overflows / Basin Cleaning Wastes to Detention Pond (I-Pond). Limitations for these waste streams are written as 04 and 05, except that "I-Pond" is not a water of the U.S. Therefore, pH monitoring is not required. The pH of the final discharge is limited at 01/01D, the "I-pond" outfalls.

Special Requirements See Part III. B.

1. PCB's: The statement from 423 is repeated.
2. and 3. Metal Cleaning Wastes: The BPT/BAT provisions are incorporated from 423. These wastes are not discharged to a U.S. water. Therefore, pH is not limited except at the final plant discharge.
4. FAC and TRC time and simultaneous discharge provisions: Part 423 is cited. If ~~these~~ the ~~provisions~~ plant cannot be ~~met~~ operated at or below these chlorine levels, the company must so demonstrate within 90 days. Further, the company must develop a new format for reporting time of FAC and TRC discharges.
5. Combined discharges: Part 423 is cited re mass-based limits.

6. Modifications: Expands Part II. B.4. to specify that the company may request changes to limits.
7. Flow characterization study: Studies are to be done every two years.
8. Sewage treatment plants: All STP's (02A, 02B, 02C, 02D) are to be operated properly. These plants do not discharge directly to a U. S. water.
9. Water treatment chemicals other than chlorine: These are to be inventoried every two years.
10. Periodic reports to be included with flow charac. studies:

    a) Stop log leakage.
    b) metal cleaning
    c) Flows
    d) Water treatment chemicals
    e) C.T. blowdown certification

6/19/86 TEH

Plant Scherer
Ash Transport Water Effluent Limitations
Outfall 01B

Available Information

02H	Low Volume Wastes	8200 gpm =	11.81 MGD
02	Ash Transport Water	36,090 gpm (net) =	51.97
02E	Coal Pile Runoff	2,500 gpm =	3.6
02C, D	STP's	34 gpm ≈	0
			67.38 MGD

Ash Pond Area = Total Runoff Area = 490 acres

10 year 24-hour storm (10Y24H) = 5.8 inches
Annual rainfall = 44.77 inches

Calculations

Runoff from 10Y24H storm at a runoff coefficient of 1.0

= (490 acres)(5.8 inches)(1 ft/12 in)(43560 ft²/acre)(7.48 gal/ft³)

= 77.2 MG

Total ash pond volume for use of alternate approach

= 144.6 MG

= 444 A-ft.

6/19/86 TEH

Case I

Ash pond water surface area (acres)	=	490
Average water depth when new	=	32.65 ft.
Subtract 2 units × 160 A-ft/year × 4 years ÷ 490 acres	=	− 2.61 ft.
Average water depth available	=	30.0 ft.
Available volume	=	14,700 A-ft

Since the pond volume exceeds the necessary storage volume of 444 A-ft. required to use the alternate approach, only dry weather flows need to be used in calculating effluent limitations.

Sources	Flow (MGD)	Daily Average Limitations (mg/l)		Daily Maximum Limitations (mg/l)	
		TSS	O&G	TSS	O&G
Low Volume Wastes	11.81	30	15	100	20
Ash Transport Water	51.97	30	15	100	20
Flow Weighted Conc.	(63.78)	30	15	100	20
Effluent Limitations for 01B		30	15	100	20

L 130

Georgia Department of Natural Resources

205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334

J. Leonard Ledbetter, Commissioner
Harold F. Reheis, Assistant Director
Environmental Protection Division

November 25, 1986

Mr. Roosevelt Childress, Acting Chief
South Area Permits Unit
Facilities Performance Branch
U. S. Environmental Protection Agency
345 Courtland Street
Atlanta, Georgia 30365

Dear Mr. Childress:

In reply to your October 29 letter, the State of Georgia has not approved any of the Section 301(g) requests listed in your letter and does not expect to do so. No further action is needed at this time.

Sincerely,

Nolton G. Johnson, P.E.
Assistant Chief
Water Protection Branch

NGJ:mck

Tom Hopkins
Ga

May 5
Chlorinate for cor April through Oct
Continuous 1 ppm all plant service water systems
Simultaneous discharge of continuous

~~10/6/84~~ 10/6/84 About Corbicula Control
~~#~~ 1 ppm EAC at main
heat exchangers [5 days/month for
24 hrs/day]

Assumed 3 days straight

No Chlorination of condenser during continuous period.

Will sequentially chlorinate Towers during non-corbicula periods.

333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-6526

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

W. R. Woodall, Jr.
Manager
Environmental Affairs

attachment 1

6/17/86
Current Form 2C pages 1-9; V-1 thru V-9 for 03, all schematics

May 5, 1986

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MAY 5 1986
ENVIRONMENTAL PROTECTION
NPDES

PLANT SCHERER
NPDES Permit N. Ga. 0035564

Mr. David M. Word
Assistant Branch Chief
Water Protection Branch
Environmental Protection Division
Floyd Towers East, Room 1070
205 Butler Street, S.E.
Atlanta, Georgia 30334

Dear Mr. Word:

Reference is made to the Plant Scherer Draft NPDES Permit issued by your office on October 22, 1985.

As a result of comments issued by EPA and discsussions with you and your staff, attached are revised pages of the permit application, updated water balance and site diagrams, and chemical analyses of discharge number 03 for your incorporation into the draft permit. Please note that the revised permit information includes discharges for all four units. Unit 3 is scheduled for start-up in October 1986, with commercial operation due to begin in January 1987. Unit 4 is scheduled for operation in 1989.

In addition, we offer the attached comments on the draft permit. If you have any further questions or comments, please advise.

Yours very truly,

W. R. Woodall, Jr.

GNG:mp
Attachments

RECEIVED
MAY 5 1986
ENVIRONMENTAL PROTECTION
DIVISION
NATURAL RESOURCES

Draft NPDES Permit No. GA0035564
Part IIIB(4) and 40 CFR 423.13(d)(2)

Discussion of Plant Scherer chlorination programs for control of Corbicula and other biofouling in the plant service water and cooling water systems

When completed, Plant Scherer will be composed of four generating units with a combined nameplate rating of 3,272 MW. Units 1 and 2 are currently in commercial operation. Unit 3 is scheduled for initial operations in October 1986, with commercial operation to begin on January 1, 1987. Unit 4 will begin commercial operation in 1989. Cooling water and service water for all four units is provided by a manmade service water storage pond (Lake Juliette) and all four units utilize closed cycle cooling with natural draft cooling towers.

As explained in our letter of October 8, 1984, (copy attached for your reference), Georgia Power believes that a Corbicula control program utilizing chlorine at Plant Scherer is essential for reliable plant operation. Chlorination for Corbicula control would generally occur from April through October, depending on intake water temperatures. Chlorine would be applied continuously at the plant service water intake pumps to maintain a 1.0 ppm residual in all plant service water systems. Since cooling tower make-up water for all units is taken from the plant service water system simultaneous chlorination of the cooling towers of all operational units would occur due to the presence of chlorine residuals in the service water system over the 5 day period. This long term chlorination of the service water is needed to control the occurance of the clams in the service water systems.

Normal biofouling control for the cooling tower systems average 2 to 3 hours per day per unit throughout the year. With two units in operation at present, each unit can be chlorinated sequentially but such practice requires the attention of plant personnel over a longer period of time (4 to 6 hours per day). When all four units come into operation, sequential chlorination would require 12 to 14 hours per day to accomplish, and would require the hiring of additional personnel to conduct the chlorination over the extended time period. Simultaneous chlorination of four units could be accomplished in 2 to 4 hours with no additional personnel requirements. Simultaneous chlorination would thus result in a net cost savings to the Company as well as allowing operating flexibility.

The discussion of cooling tower blowdown in the Preamble to the 1982 Steam Electric Guidelines states that "The major technology options for this wastestream are dechlorination, chemical substitution, and chemical precipitation" (FR, Vol. 47, Friday, November 19, 1982, p.52295). It is Georgia Power's intent to install and operate a common dechlorination facility to treat the combined blowdown from Units 1 - 4 (OSN-01A) and also to install and operate a dechlorination facility downstream of the minimum flow lines in the service water final discharge to Lake Juliette (OSN-03). Simultaneous operation of these dechlorination facilities during the Corbicula control program and during normal cooling water chlorination will insure that effluent limits of 0.2/0.5 mg/l FAC can be achieved at both outfalls. Although the FAC effluent limits of 0.2/0.5 mg/l will be achieved, the time of TRC discharge may exceed the 2 hour per day per unit limitation during periods of chlorination for Corbicula control.

We propose to institute a monitoring program to insure that the installed dechlorination facilities are operating properly and that chlorine effluent limitations are being met at the defined discharge locations. Dechlorination facilities would be operated simultaneously with the chlorinators and samples for FAC and TRC would be taken according to the following schedule.

During periods of chlorination for Corbicula control, samples would be taken once per day immediately following the dechlorination facilities for both OSN-01A and OSN-03 and analyzed for FAC and TRC. Following discontinuance of chlorination activities the cooling tower blowdown and service water return would be monitored for chlorine. When FAC and TRC residuals were less than 0.2 mg/l, dechlorination would be discontinued and a sample taken past the dechlorination facility to insure that FAC and TRC residuals met acceptable criteria.

During the once per week periods of normal service water and cooling tower chlorination, a sample would be taken immediately following the dechlorination facilities for the system or systems being chlorinated at the time, and analyzed for FAC and TRC to insure proper operation of the dechlorination equipment. Following discontinuance of chlorination, the system or systems would be monitored upstream of the dechlorination facility until FAC and TRC residuals were less than 0.2 mg/l. Dechlorination would then be discontinued and a sample taken downstream of the dechlorination equipment to insure FAC and TRC residuals were less than 0.2 mg/l.

Results of analyses performed on permitted discharges will be reported in the Operations Monitoring Report.

The dechlorination unit for the combined cooling tower blowdown for Units 1-4 (01A) is on site and engineering work for its installation has begun. Engineering for the dechlorination unit for discharge 03 has also begun and the unit will be acquired when the specifications have been developed. We anticipate having both systems installed and fully operational within the next 18 months. The dechlorination unit for the cooling tower blowdown will be placed in service with either temporary or permanent piping prior to the start-up of Unit 3 in October 1986. Until this dechlorination facility is operational we plan to chlorinate Units 1 and 2 sequentially with the blowdown valves closed.

Once the 01A dechlorinator is installed we plan to begin the chlorination programs described above. The cooling towers would be simultaneously chlorinated and the blowdowns dechlorinated.

Chlorination for Corbicula control will not begin until the dechlorination unit for discharge 03 is installed and operational. Normal service water chlorination will be accomplished by closing the 03A and 03B discharges and diverting all chlorinated service water to the Units 1 and 2 cooling towers. This action will prevent the discharge of FAC or TRC from outfall 03. This service water chlorination procedure will be used only until the dechlorination unit is operational due to the lack of control of cooling tower water chemistry and the resulting detrimental effects on the tower fill material. The FAC and TRC discharges resulting from this normal service water chlorination will be controlled by the dechlorination facility at discharge 01A, cooling tower blowdown.

EPA CONCERNS:

EPA addressed the heat component of the service water discharge (03) in their comments on the October 22, 1985, Draft Permit. Because this service water system services auxillary heat exchangers and other miscellaneous non-contact cooling equipment, we do not expect a significant temperature rise at the discharge. Currently Units 1 and 2 are operating on a peak load basis and simultaneous operation of both units at near maximum capacity may not occur until this summer. We propose to conduct a one time demonstration to verify that our 03 discharge is within State water quality standards. This demonstration would be conducted at the earliest possible time when both Units 1 and 2 were operating at near maximum load. Temperature profiles would be taken in Lake Juliette at locations near the dischage point at 1 meter increments from the surface to the bottom. This data would then be submitted for your consideration as to the necessity for further temperature monitoring of this discharge. This demonstration could be included as a special condition of the permit.

Specific comments - draft permit

A. page 4 of 19, 01B Ash Transport Water and page 5 of 19, 02J Settling Pond Emergency Overflow

Georgia Power Company objects in principle to the use of EPA's Guidance for NPDES Permits Issued to Steam Electric Power Plants, dated August 22, 1985. This is a guidance document only, which has not been issued through appropriate Administrative Rulemaking Procedures, and therefore is not binding on the State Environmental Protection Division. Georgia Power also disagrees with specific portions of the Guidance Document, much of its methodology, and with portions of the EPA's comments, dated October 22, 1985, on the Plant Scherer Draft NPDES Permit.

EPA has encouraged the use of centralized, combined treatment systems in the electric utility industry. As EPA's 1980 Steam Electric Development Document says:

> "Consolidation of wastestreams to a centralized treatment system is permitted and encouraged."

Also, the 1974 Preamble to the steam electric guidelines says:

> It is also recognized by EPA that due to the economies of scale, combining similar waste streams for treatment to remove the same pollutants is generally less costly than separate treatment of these waste streams. The employment of cost saving alternatives in meeting the effluent limitations should not be discouraged.

Such co-treatment of similar waste streams is now standard practice at all Georgia Power Company coal fired steam-electric generating plants, utilizing the ash pond as the treatment unit in most instances.

EPA's Guidance Document and recent comments on the draft permit now seem to attempt to penalize the plants where co-treatment is utilized by considering rainfall related flows as dilution water and allowing no credit for suspended solids (TSS) and oil and grease that might be present in these streams.

One major rainfall related waste stream involved in these guidelines is coal pile runoff. The Guidance Document states that the limitations for coal pile runoff is an instantenous 50 mg/l for TSS and no allowance for oil and grease for flows directed to an ash pond. Our interpretation of the Steam Electric Guidelines is that this limitation applies only to a "point source discharge" to waters of the U.S. In this context then, coal pile runoff effluent can be directly discharged to waters of the U.S. as long as the 50 mg/l maximum TSS is met and with no limitations on oil and grease. Routing of this effluent to and ash pond however, is not a "point source discharge" as

defined by the Steam Electric Guidelines and therefore is not regulated for TSS and oil and grease. Although EPA's comments of October 22, 1985, suggest a BPJ limit on coal pile runoff of 30/30 mg/l as both daily maximum and daily average, we contend that coal pile runoff is unregulated for the TSS during the averaging times at issue in the combined waste streams calculations (24 hour retention time in the ash pond). Thus, the utility combined waste stream rule does not apply to coal pile runoff. We further contend that the 30/100 TSS limits afforded other regulated streams are appropriate when coal pile runoff is routed to an ash pond since available ash pond effluent data in the guidelines record shows that the appropriate level of treatment which coal pile runoff gets when it is routed to an ash pond is 30/100 mg/l. This conclusion also applies to oil and grease limits for coal pile runoff to an ash pond. There are no effluent guidelines limits on oil and grease for coal pile runoff, and the standard 15/20 mg/l limits reflect ash pond treatment capabilities for these pollutants.. Any lower limits would be unreasonable since, if the runoff were not routed to an ash pond, it could be discharged untreated for oil and grease.

Likewise, other unregulated, rainfall related flows that are directed to an ash pond should qualify as low volume wastes under Section 423.11(b) since no categorical limits have been set for them. As such they would be allowed limits on TSS of 30/100 mg/l and 15/20 mg/l for oil and grease.

Georgia Power is strongly of the view that complex regulatory action on rainfall related streams is needless and provides little, if any, environmental protection. Application of limits of 30/100 mg/l for TSS and 15/20 mg/l for oil and grease to all rainfall related waste streams directed to an ash pond will greatly simplify permit issuance and enforcement, will allow for utility operating flexibility, and will afford adequate protection to waters of the U.S. which ultimately receive ash pond discharges.

In the event that the Environmental Protection Division intends to proceed with the use of the EPA Guidance Document, Georgia Power believes that the volume retention test for and ash pond should be used as a screening device only, and that we should be allowed to make a case-by-case demonstration of ash pond efficiency in meeting rainfall conditions in the event that any ash pond does not pass the retention volume test. We also believe that in the event of a volume test failure and/or a failure of a case-by-case demonstration that we should be allowed demonstrated or BPJ cretits for actual TSS and oil and grease in all rainfall related, or other unregulated, streams directed to an ash pond, instead of receiving zero credit.

As stated above, Georgia Power Company does not concur with the application of EPA' Guidance Document or its methodology, however, the following comments on Plant Scherer's ash pond are provided for EPD's consideration in the event that the methodology in the Guidance Document is applied to this permit.

Because of comments made by Mr. John T. Marlar, Chief, Facilities Performance Branch, EPA Region IV, on the draft NPDES permit, a mass balance of the Plant Scherer Ash Pond system was estimated by EPD assuming a volume test failure of the pond, and thus including wet weather flows into the calculations.

We now have had time to gather additional information on the ash pond system which demonstrates that the ash pond will pass the storage volume test as described in the EPA Guidance Document. Plant Scherer's ash pond has no significant drainage area and was designed for probable maximum precipitation (PMP) on the pond, the small tributary drainage area, and the maximum ash water inflow from the plant. The surface area of the ash pond is approximately 490 acres with the top of the dam at 505 ft MSL and the PMP elevation is 504 ft MSL. For normal operation a drop inlet spillway with crest elevation at 494.5 ft MSL and discharge capacity based on a 100 year flood has been provided. Normal operating pond level is 495 ft MSL.

It has been estimated that four unit operation at Plant Scherer will produce approximately 640 AF of ash per year. With available storage at full pond, elevation 495.0, of 16,000 AF, the ash pond has a life of approximately 25 years.

Using 160 AF of ash deposited per year per unit (640 AF for 4 units), and the length of time each unit will have been in operation in 1991 (assuming a 5 year permit issued in 1986), approximately 3110 AF of ash will have been deposited in the pond by 1991. At normal pond elevation (495.0) this leaves 12,890 AF for storage capacity available in 1991. The additional storage volume in the settling pond before the emergency overflow is reached is 5600 AF.

The EPD mass balance figures show input into the ash pond to be 71.08 MGD. No significant unregulated, uncontaminated dry weather flows enter the ash pond. This 71.08 MG is equivalent to 218.2 AF required to meet the volume storage test as defined by the EPA at permit expiration. The pond will have 12,890 AF available as described above. Therefore the volume test is passed and only dry weather flows should be included in the mass balance calculations. Since the only dry weather flows entering the pond are Ash Transport Water and Low Volume Wastes, both regulated for 30/100 TSS and 15/20 O&G, combined effluent limitations for the two discharges, OSN-01B and OSN-02J, should remain at the maximum allowable of 30/100 TSS and 15/20 O&G.

B. page 5 of 19, 02J Settling Pond Emergency Overflow to Lake Juliette (Ash Transport Water)

Footnote (1) should include pH monitoring only when a discharge is occuring

C. page 6 of 19, 02K Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes)

Footnote (1) should include pH monitoring only when a discharge is occuring

D. page 9 of 19, 06 Service Water Storage Pond (Lake Juliette) Discharge to Rum Creek

This discharge should be eliminated because of limits to be placed on OSN-03, Service Water Return Line

E. page 18 of 19, Special Condition B3

The requirement for pH in the range of 6.0 to 9.0 standard units should be deleted for the following reasons:

1) 40 CFR 122.2 defines "Discharge when used without qualification means the 'discharge of a pollutant'"

"Discharge of a pollutant means: (a) Any addition of any 'pollutant' or combination of pollutants to 'waters of the United States' from any 'point source' or . . ."

2) 40 CFR 423.12(b)(1) states: "The pH of all discharges, except once through cooling water, shall be within the range of 6.0 -9.0."

3) 40 CFR 423.12(b)(5) does not list a limitation for pH for metal cleaning wastes

Since flows from our metals cleaning ponds to the Unit 1 & 2 Waste Water Retention Basin do not constitute a "discharge" to "waters of the United States", such flows are an internal waste stream that can benefit from further neutralization for pH by combining with other waste streams. Such neutralization for pH is accepted technology.

Monitoring the final plant discharge from the Detention Pond (I-Pond) is currently regulated for pH for the range 6.0 to 9.0. This "point source discharge" is sufficient to protect "Waters of the United States" while allowing the Company the benifit of neutralization for pH within its internal treatment units.

Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-6526

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

Georgia Power

Power Supply Engineering and Services

October 8, 1984

PLANT SCHERER
Control of Asiatic Clams (Corbicula fluminea)

Mr. Gene B. Welsh, Chief
Water Protection Branch
Environmental Protection Division
270 Washington Street, S. W.
Atlanta, Georgia 30334

Dear Mr. Welsh:

The Asiatic Clam (Corbicula fluminea) has been found in the Ocmulgee River near our Plant Scherer, as well as in our service water storage pond (Lake Juliette). As you may know, this pest organism can, and has, caused many problems for the electric power industry. It has been responsible for plugging of heat exchanger tubes, cooling water lines, and many other related plant water systems nationwide, as well as in other Georgia Power operating plants.

Chlorine is the only currently EPA approved moluscicide and is in wide usage for clam control. Unfortunately, Corbicula are quite resistant to chlorine and high residuals over prolonged periods of time are required to help control them.

Due to the presence of Corbicula in our service water storage pond at Plant Scherer, we request your concurrence on a program to help control the occurrence of Corbicula in vital plant water systems. We wish to chlorinate the general service water at a rate of 1.0 PPM free available chlorine (FAC), as measured at the exit from the main heat exchangers. Chlorine would be applied at this rate five (5) days per month for 24 hours per day.

This chlorination program would be conducted in conjunction with the addition of chemicals to the cooling towers which would increase the cycles of concentration from two (2) to six (6) to seven (7); (reference our letter to Mr. David M. Word, dated August 3, 1984, on the use of Nalco Sure-Cool 1332). This procedure would result in the discharge of 7000 GPM per unit at a chlorine concentration of approximately 1.0 PPM FAC.

The discharge would be back to the service water storage pond (Lake Juliette) through the minimum flow lines or the cooling water recycle lines (reference our letter dated October 4, 1984 concerning NPDES discharges).

We believe that this program is necessary to help insure the reliable operation of Plant Scherer by reducing the chances of forced outages due to fouling of vital water systems by Corbicula.

Please advise if you have questions or comments concerning this request.

Yours very truly,

W. R. Woodall, Jr.
Manager of Environmental Affairs

GNG:pd

Form 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS

Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
01	33	03	06	83	48	29	Ocmulgee River via Berry Creek
02	33	03	06	83	48	29	and Plant Scherer Service Water Storage
03	33	03	06	83	48	29	Pond (Lake Juilette)
04	33	03	06	83	48	29	Ditto -
05	33	03	06	83	48	29	Ditto -
06, 07	33	03	06	83	48	29	

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NATURAL RESOURCES

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined *(e.g. for certain mining activities)*, provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
01	Detention Pond (I-Pond)	38,855 gpm			4A
	Final Discharge to Berry Creek				
	01A Cooling Tower Blowdown	(Unit 1-4) 31,540 gpm		**2E,**2F	4A
	01B Ash Transport Water	9,300 gpm			4A
	Bleedoff				
	01C Concrete Batch Plant	25 gpm*			4A
	01D I-Pond Bottom Drain	*			
02	Ash Transport Water	45,390 gpm			4A
	02A Main Sewage	120 gpm		2F	4A
	Treatment Plant				
	02B Coal Handling Sewage	17 gpm		2F	4A
	Treatment Plant				
	02C Unit 1 Temporary Sewage	17 gpm		2F	4A
	Treatment Plant				
	02D Unit 2 Temporary Sewage	17		2F	4A
	Treatment Plant				
	02E Coal Pile Runoff Basin	2,500 gpm			4A
	02F Tractor Garage	300 gpm			4A
	02G Coal Pile Runoff *				4A
	02H Waste Water Basin(Units 1-4)	8,200 gpm			4A
	02I Low Volume Wastes(Units 1-4)	2,000 gpm			4A
	02J Settling Pond Emerg.Overflow*				4A
	02K Waste Water Basin Emerg. Overflow (Units 1&2)				4A
	02L Waste Water Basin Emerg. Overflow (Units 3&4)				4A

OFFICIAL USE ONLY *(effluent guidelines sub-categories)*

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ YES *(complete the following table)* ☐ NO *(go to Section III)*

1. OUTFALL NUMBER *(list)*	2. OPERATION*(s)* CONTRIBUTING FLOW *(list)*	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK *(specify average)*	b. MONTHS PER YEAR *(specify average)*	a. FLOW RATE *(in mgd)*		b. TOTAL VOLUME *(specify with units)*		c. DUR ATIO *(in day*
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES *(complete Item III-B)* ☐ NO *(to to Section IV)*

B. Are the limitations in the applicable effluent guideline expressed in terms of production *(or other measure of operation)*?

☐ YES *(complete Item III-C)* ☐ NO *(go to Section IV)*

C. If you answered "Yes" to Item III-B, list the quantity which represents an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. MAXIMUM QUANTITY			2. AFFECTED OUTFALLS *(list outfall numbers)*
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of waste water treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and gran or loan conditions.

☐ YES *(complete the following table)* ☐ NO *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COM PLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. RE-QUIRED	b. PRO-JECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs *(or other environmental projects which may affec your discharges)* you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual o planned schedules for construction. ☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUE ON PAGI

FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined *(e.g., for certain mining activities)*, provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
03	Service Water Final Discharge	7,000 gpm/Unit***		**2E, **2F 4A
	03A Serv.Water Return Line to Water Storage Pond - Lake Juliette	42,900 gpm***		*2E, **2F 4A
	03B Minimum Flow Lines	4,600 gpm***		4A
	Discharge to Service Water Storage Pond (Lake Juliette) Service Water Return			
04	Unit 1 Cooling Tower Basin	100 gpm		**2F 4A
	Overflow/Basin Cleaning Wastes to Lake Juliette*			
05	Unit 2 Cooling Tower Basin	100 gpm		**2F 4A
	Overflow/Basin Cleaning Wastes to Lake Juliette*			
06	Unit 3 Cooling Tower Basin	100 gpm		**2E 4A
	Overflow/Basin Cleaning			**2F
	Wastes to I-Pond*			
07	Unit 4 Cooling Tower Basin	100 gpm		**2E
	Overflow/Basin Cleaning			**2F
	Wastes to I-Pond*			
	* Intermittant Discharge			
	** During Periods of Chlorination			
	*** Deptending on plant requirements			

OFFICIAL USE ONLY *(effluent guidelines sub-categories)*

CONTINUE ON REVERSE

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ YES *(complete the following table)* ☐ NO *(go to Section III)*

1. OUTFALL NUMBER *(list)*	2. OPERATION(s) CONTRIBUTING FLOW *(list)*	3. FREQUENCY a. DAYS PER WEEK *(specify average)*	3. FREQUENCY b. MONTHS PER YEAR *(specify average)*	4. FLOW a. FLOW RATE *(in mgd)* 1. LONG TERM AVERAGE	4. FLOW a. FLOW RATE *(in mgd)* 2. MAXIMUM DAILY	4. FLOW b. TOTAL VOLUME *(specify with units)* 1. LONG TERM AVERAGE	4. FLOW b. TOTAL VOLUME *(specify with units)* 2. MAXIMUM DAILY	4. FLOW c. DURATION *(in days)*
01C	Concrete Batch Plant	25 GPM Depends on availability of off-site concrete for remainder of construction.						
01D	I-Pond Bottom Drain	Contents of Pond-Emergency Maintenance Use Only.						
04	Unit 1 Cooling Tower Basin Cleaning Wastes	Tower drained for cleaning twice per year.						
05	Unit 2 Cooling Tower Basin Cleaning Wastes	Ditto -						
06	Unit 3 Cooling Tower Basin Cleaning Wastes	Ditto -						
07	Unit 4 Cooling Tower Basin Cleaning Wastes	Ditto -						

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ YES *(complete Item III-B)* ☐ NO *(to to Section IV)*

B. Are the limitations in the applicable effluent guideline expressed in terms of production *(or other measure of operation)*?

☐ YES *(complete Item III-C)* ☒ NO *(go to Section IV)*

C. If you answered "Yes" to Item III-B, list the quantity which represents an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. MAXIMUM QUANTITY a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*	2. AFFECTED OUTFALLS *(list outfall numbers)*

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of waste water treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and gran or loan conditions.

☐ YES *(complete the following table)* ☒ NO *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS a. NO.	2. AFFECTED OUTFALLS b. SOURCE OF DISCHARGE	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE a. REQUIRED	4. FINAL COMPLIANCE DATE b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs *(or other environmental projects which may affe your discharges)* you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual planned schedules for construction. ☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

ASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of information on separate sheets *(use the same format)* instead of completing these pages. INSTRUCTIONS.

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INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)*

OUTFALL NO 03

ART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE *(if available)* (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE *(if available)* (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	3. UNITS *(specify if blank)* a. CONCENTRATION	b. MASS	4. INTAKE *(optional)* a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
iochemical /gen Demand (D)	1.5						1	mg/l				
hemical gen Demand D)	7.6						1	mg/l				
al Organic (TOC)												
otal Suspended ds (TSS)	1.9						1	mg/l				
mmonia *(as N)*	< 0.02						1	mg/l				
ow	VALUE 42,900 gpm max		VALUE		VALUE					VALUE		
emperature ter)	VALUE		VALUE		VALUE			°C		VALUE		
emperature mer)	VALUE		VALUE		VALUE			°C		VALUE		
	MINIMUM 7.17	MAXIMUM	MINIMUM	MAXIMUM			1	STANDARD UNITS				

RT B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

LLUT- AND AS NO. *vailable)*	2. MARK "X" a. BELIEVED PRESENT	b. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE *(if available)* (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE *(if available)* (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE *(optional)* a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
omide 59-67-9)		X												
lorine, Residual														
lor														
cal orm			0						1	col/100ml				
oride 34-48-8)		X												
rate– e *(as N)*	X		< 0.2						1	mg/l				

CONTINUE ON REVERSE

. POLLUTANT AND CAS NO. (if available)	2. MARK 'X' a. BELIEVED PRESENT	b. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
. Nitrogen, otal Organic as N)														
. Oil and Grease			< 5						1	mg/l				
Phosphorus as P), Total 7723-14-0)			0.044						1	mg/l				
Radioactivity														
l) Alpha, otal		X												
) Beta, otal		X												
Radium,		X												
) Radium 6, Total		X												
Sulfate SO_4) 4808-79-8)		X												
Sulfide S)		X												
Sulfite SO_3) 4265-45-3)		X												
Surfactants		X												
Aluminum, tal 29-90-5)		X												
Barium, tal 40-39-3)		X												
Boron, al -42-8)		X												
obalt, al 40-48-4)		X												
on, Total 39-89-6)			0.15											
lagnesium, al 39-95-4)			3.04											
olybdenum, al 39-98-7)		X												
langanese, al 39-96-5)			<0.1											
In, Total 0-31-5)			<0.1											
itanium, l 0-32-6)		X												

CONTINUE ON PAGE V - 3

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
	03

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TINUED FROM PAGE 3 OF FORM 2-C

RT C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a *(secondary industries, non–process wastewater outfalls, and non–required GC/MS fractions)*, mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table *(all seven pages)* for each outfall. See instructions for additional details and requirements.

OLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (2) MASS	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	a. LONG TERM AVERAGE VALUE (2) MASS	b. NO. OF ANALYSES
ALS, CYANIDE, AND TOTAL PHENOLS															
Antimony, 7440-36-0)			X												
Arsenic, Total 0-38-2)			X												
Beryllium, l, 7440-41-7)			X												
Cadmium, l (7440-43-9)			X												
Chromium, l (7440-47-3)				<0.1						1	mg/l				
Copper, Total 0-50-8)				<0.1						1	mg/l				
Lead, Total 9-97-6)				<0.01						1	mg/l				
Mercury, Total 9-97-6)				<0.001						1	mg/l				
Nickel, Total 0-02-0)				<0.1						1	mg/l				
Selenium, l (7782-49-2)			X												
Silver, Total 0-22-4)			X												
Thallium, l (7440-28-0)			X												
Zinc, Total 0-66-6)				<0.1						1	mg/l				
Cyanide, l (57-12-5)			X												
Phenols, l			X												
XIN															
7,3-Tetra-rodibenzo-P-in (1764-01-6)			X	DESCRIBE RESULTS											

ONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
C/MS FRACTION – VOLATILE COMPOUNDS															
V. Acrolein 07-02-8)			X												
V. Acrylonitrile 07-13-1)			X												
/. Benzene 1-43-2)			X												
/. Bis (Chloro-ethyl) Ether 42-88-1)			X												
'. Bromoform 5-25-2)			X												
Carbon hloride -5)			X												
. Chlorobenzene 08-90-7)			X												
. Chlorodi-ımomethane 4-48-1)			X												
. Chloroethane -00-3)			X												
/. 2-Chloro-ylvinyl Ether 0-75-8)			X												
'. Chloroform -66-3)			X												
'. Dichloro-nomethane 27-4)			X												
. Dichloro-ıoromethane 71-8)			X												
. 1,1-Dichloro- (75-34-3)			X												
. 1,2-Dichloro-ne (107-06-2)			X												
1,1-Dichloro-lene (75-35-4)			X												
1,2-Dichloro-ane (78-87-5)			X												
1,3 Dichloro-ylene 75-6)			X												
Ethylbenzene 41-4)			X												
Methyl ide (74-83-9)			X												
Methyl ide (74-87-3)			X												

CONTINUE ON PAGE V-5

ITINUED FROM PAGE V-4

EPA I.D. NUMBER (copy from Item 1 of Form 1) | OUTFALL NUMBER 03

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POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
/MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
/. Methylene oride (75-09-2)			X												
/. 1,1,2,2-Tetra-roethane -34-5)			X												
/. Tetrachloro-ylene (127-18-4)			X												
/. Toluene 3-88-3)			X												
. 1,2-Trans-roethylene 0-5)			X												
. 1,1,1-Tri-roethane 55-6)			X												
. 1,1,2-Tri-roethane 00-5)			X												
. Trichloro-lene (79-01-6)			X												
. Trichloro-romethane 69-4)			X												
. Vinyl ride (75-01-4)			X												
MS FRACTION – ACID COMPOUNDS															
2-Chlorophenol 57-8)			X												
2,4-Dichloro-ol (120-83-2)			X												
4-Dimethyl-ol (105-67-9)			X												
4,6-Dinitro-O-ol (534-52-1)			X												
2,4-Dinitro-ol (51-28-5)			X												
2-Nitrophenol 5-5)			X												
4-Nitrophenol -02-7)			X												
-Chloro-M-ol (59-50-7)			X												
entachloro-ol (87-86-5)			X												
Phenol 95-2)			X												
2,4,6-Tri-ophenol 6-2)			X												

ONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
B. Acenaphthene B3-32-9)			X												
B. Acenaphtylene 208-96-8)			X												
B. Anthracene 120-12-7)			X												
B. Benzidine 92-87-5)			X												
B. Benzo *(a)* nthracene 56-55-3)			X												
B. Benzo *(a)* e (50-32-8)			X												
b. 3,4-Benzo- uoranthene 05-99-2)			X												
B. Benzo *(ghi)* rylene 91-24-2)			X												
B. Benzo *(k)* uoranthene 07-08-9)			X												
B. Bis *(2-Chloro- hoxy)* Methane 11-91-1)			X												
B. Bis *(2-Chloro- yl)* Ether 11-44-4)			X												
B. Bis *(2-Chloro- propyl)* Ether 9638-32-9)			X												
B. Bis *(2-Ethyl- xyl)* Phthalate 17-81-7)			X												
B. 4-Bromo- enyl Phenyl er (101-55-3)			X												
Butyl Benzyl thalate (85-68-7)			X												
B. 2-Chloro- hthalene -58-7)			X												
B. 4-Chloro- nyl Phenyl er (7005-72-3)			X												
B. Chrysene 8-01-9)			X												
B. Dibenzo *(a,h)* thracene -70-3)			X												
B. 1,2-Dichloro- zene (95-50-1)			X												
1,3-Dichloro- zene (541-73-1)			X												

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EPA I.D. NUMBER (copy from Item 1 of Form 1) | OUTFALL NUMBER 03

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POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
MS FRACTION — BASE/NEUTRAL COMPOUNDS (continued)															
. 1,4-Dichloro-zene (106-46-7)			X												
. 3,3'-Dichloro-zidine 94-1)			X												
. Diethyl halate -66-2)			X												
. Dimethyl halate 1-11-3)			X												
. Di-N-Butyl ate 4-2)			X												
. 2,4-Dinitro-ene (121-14-2)			X												
. 2,6-Dinitro-ene (606-20-2)			X												
. Di-N-Octyl alate -84-0)			X												
. 1,2-Diphenyl-azine (as Azo-ene) (122-66-7)			X												
. Fluoranthene -44-0)			X												
. Fluorene 73-7)			X												
. Hexa-robenzene -71-1)			X												
. Hexa-butadiene 3-3)			X												
. Hexachloro-pentadiene 47-4)			X												
. Hexachloro-ne (67-72-1)			X												
. Indeno 3-cd) Pyrene -39-5)			X												
. Isophorone 59-1)			X												
. Naphthalene 20-3)			X												
. Nitrobenzene 95-3)			X												
. N-Nitro-methylamine 75-9)			X												
. N-Nitrosodi-opylamine -64-7)			X												

CONTINUE ON REVERSE

NTINUED FROM THE FRONT

POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
B. N-Nitro-diphenylamine 6-30-6)			X												
B. Phenanthrene 5-01-8)			X												
B. Pyrene 9-00-0)			X												
B. 1,2,4 - Tri-orobenzene 0-82-1)			X												
/MS FRACTION – PESTICIDES															
Aldrin 9-00-2)			X												
3HC 9-84-6)			X												
β-BHC 9-85-7)			X												
γ-BHC -89-9)			X												
δ-BHC 9-86-8)			X												
Chlordane -74-9)			X												
4,4'-DDT -29-3)			X												
4,4'-DDE 55-9)			X												
4,4'-DDD 54-8)			X												
ieldrin -1)			X												
α-Endosulfan 5-29-7)			X												
β-Endosulfan 5-29-7)			X												
Endosulfan ate 11-07-8)			X												
Endrin 20-8)			X												
Endrin ihyde 1-93-4)			X												
Heptachlor 44-8)			X												

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NTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
	03

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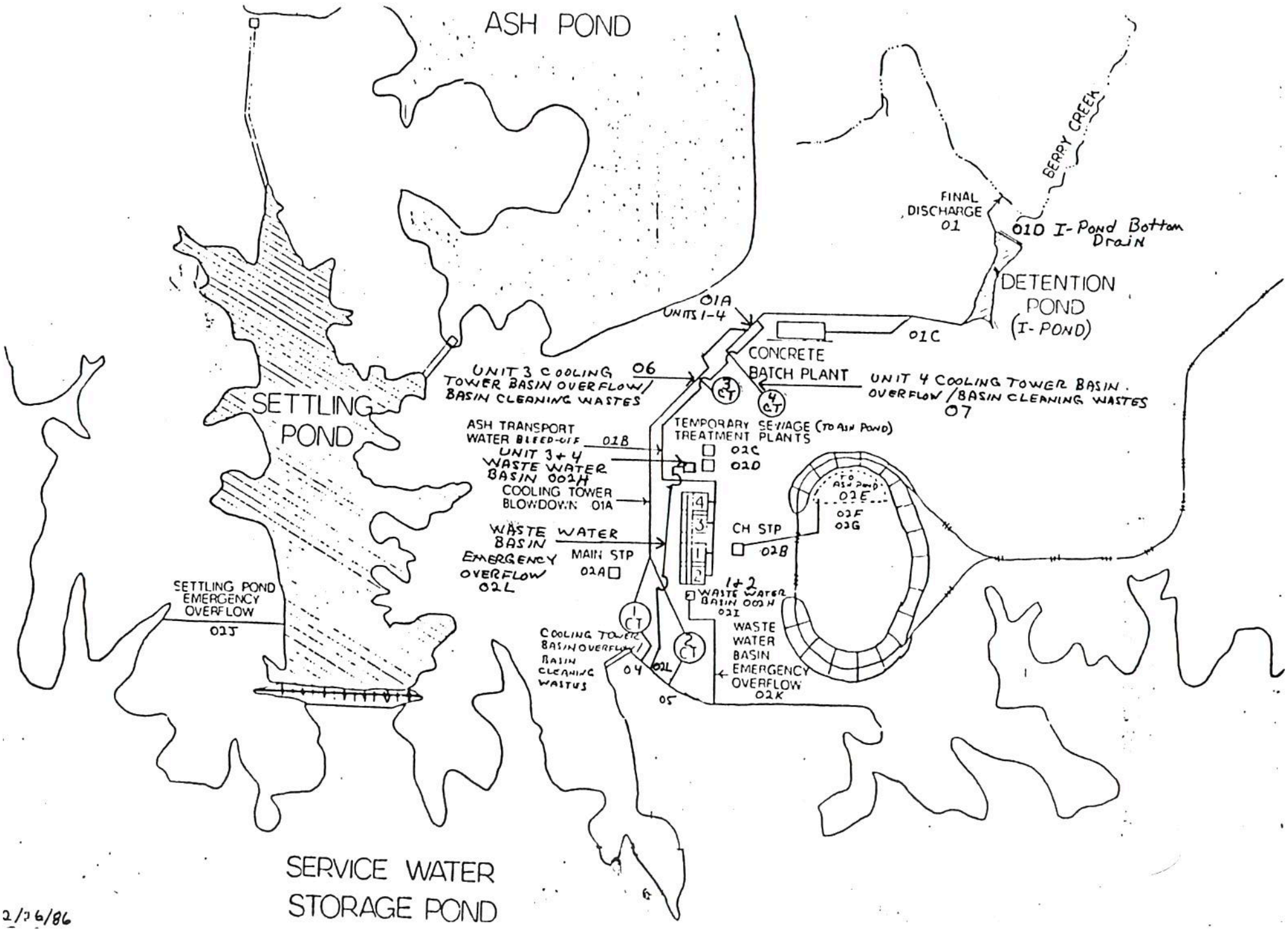
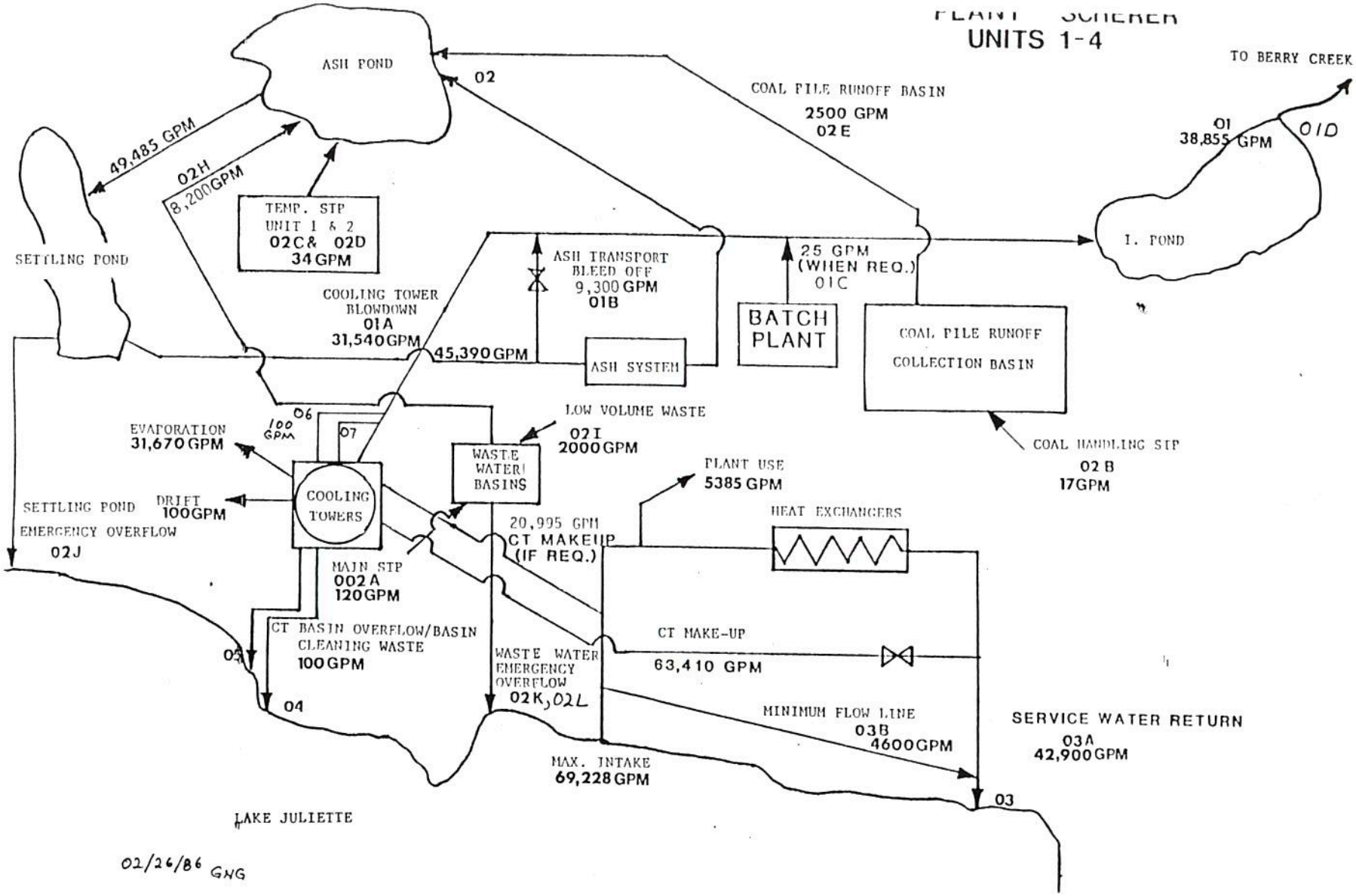
OMB No. 2000-0059
Approval expires 3-31-84

POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
/MS FRACTION – PESTICIDES *(continued)*															
'. Heptachlor oxide 24-57-3)			X												
'. PCB-1242 469-21-9)			X												
. PCB-1254 097-69-1)			X												
. PCB-1221 104-28-2)			X												
CB-1232 1-16-5)			X												
. PCB-1248 572-29-6)			X												
. PCB-1260 096-82-5)			X												
PCB-1016 574-11-2)			X												
Toxaphene 11-35-2)			X												


ASH POND
BERRY CREEK
FINAL DISCHARGE 01
010 I-Pond Bottom Drain
DETENTION POND (I-POND)
01A UNITS 1-4
01C
CONCRETE BATCH PLANT
UNIT 3 COOLING TOWER BASIN OVERFLOW/ BASIN CLEANING WASTES 06
UNIT 4 COOLING TOWER BASIN. OVERFLOW/BASIN CLEANING WASTES 07
SETTLING POND
ASH TRANSPORT WATER BLEED-OFF 02B
UNIT 3+4 WASTE WATER BASIN 002H
COOLING TOWER BLOWDOWN 01A
TEMPORARY SEWAGE (TO ASH POND) TREATMENT PLANTS
02C
02D
TO ASH POND 02E
02F
02G
WASTE WATER BASIN EMERGENCY OVERFLOW 02L
MAIN STP 02A
CH STP 02B
1+2 WASTE WATER BASIN 002H 02I
SETTLING POND EMERGENCY OVERFLOW 02J
COOLING TOWER BASIN OVERFLOW/ BASIN CLEANING WASTES
04
02L
05
WASTE WATER BASIN EMERGENCY OVERFLOW 02K
SERVICE WATER STORAGE POND

2/26/86


PLANT SCHERER
UNITS 1-4
ASH POND
02
COAL PILE RUNOFF BASIN
2500 GPM
02E
TO BERRY CREEK
01
38,855 GPM
01D
I. POND
49,485 GPM
02H
8,200GPM
TEMP. STP
UNIT 1 & 2
02C & 02D
34 GPM
SETTLING POND
ASH TRANSPORT
BLEED OFF
9,300 GPM
01B
25 GPM
(WHEN REQ.)
01C
COOLING TOWER
BLOWDOWN
01A
31,540GPM
45,390GPM
ASH SYSTEM
BATCH
PLANT
COAL PILE RUNOFF
COLLECTION BASIN
06
100
GPM
07
LOW VOLUME WASTE
02I
2000GPM
EVAPORATION
31,670GPM
WASTE
WATER
BASINS
COAL HANDLING STP
02B
17GPM
PLANT USE
5385 GPM
SETTLING POND
DRIFT
100GPM
COOLING
TOWERS
HEAT EXCHANGERS
EMERGENCY OVERFLOW
02J
20,995 GPM
CT MAKEUP
(IF REQ.)
MAIN STP
002A
120GPM
CT BASIN OVERFLOW/BASIN
CLEANING WASTE
100GPM
CT MAKE-UP
63,410 GPM
05
WASTE WATER
EMERGENCY
OVERFLOW
02K, 02L
04
MINIMUM FLOW LINE
03B
4600GPM
SERVICE WATER RETURN
03A
42,900GPM
MAX. INTAKE
69,228GPM
03
LAKE JULIETTE

02/26/86 GNG

DRAFT/FINAL A/O? _____

TO WALLACE_____ DUE_____

FISCAL YEAR 1986 NPDES PERMIT REVIEW

STATE: _____

FACILITY: _____

NPDES # : _____

PRE-DRAFT_____ DRAFT_____ FINAL_____

_____NEW

_____MAJOR IND.

_____MAJOR MUN.

_____MAJOR PRI.

_____MINOR PRI.

_____INTERSTATE

_____

ROUTING: 1. LOG/DATE_____

2. ~~PATRICK~~ PW 9/15

3. ASSIGNED TO Darlene / Lisa DUE_____

4. UNIT CHIEF (IF PROBLEMS)

5. LOG

6. PCS (FINALS) / FILE (DRAFTS)

COMMENTS:

ACTION TO BE TAKEN: _____

COMPLETED BY: _____ DATE: _____

11-7

Georgia Department of Natural Resources

205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334

J. Leonard Ledbetter, Commissioner
Harold F. Reheis, Assistant Director
Environmental Protection Division
(404) 656-4713

Patrick Vorsatz 9/19

September 16,1986

9/25

Mr. Bruce R. Barrett, Director
Water Management Division
U.S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

RE: Georgia Power Company
Plant Scherer
NPDES Permit No. GA 0035564

Bruce

Dear Mr. Barrett:

We are responding to a letter dated July 29, 1986 from Mr. John Marlar to Mr. Jack Dozier regarding comments on the above referenced July 3, 1986 draft NPDES permit. In our meeting on August 12, 1986 we agreed that Georgia would develop a statewide strategy for controlling TRC (and other) toxicity. It was further agreed that EPA would not object to permits where TRC is a potential concern until our strategy is operable and a TRC toxicity problem has been documented.

In order to be consistent with this approach, we are withdrawing the TRC limit of 0.5 mg/l at outfall 03. Only monitoring will be required until field investigations determine the need for a water-quality based limit. This should resolve your specific objection and facilitate issuance of this permit.

Responses to your comments and recommendations follow using the sequence of Mr. Marlar's letter:

1. Outfalls 01B and 02J - Ash Transport Water
   We decline to add more monitoring and certifications. Power plants are very complex facilities and we wish to simplify the NPDES permits wherever possible. The permit limits comply with the guidelines. Part I.C.1. requires representative sampling. Georgia Power has acted responsibly in the past to collect additional samples when needed and maintain all treatment units so that permits are not violated.

2. Outfall 01A-Cooling Tower Blowdown
   We propose no changes to the draft requirements. A July 29, 1986 letter from Georgia Power indicates that their May 5, 1986 discussion of chlorination practices will serve as a demonstration

of the need to simultaneously chlorinate for more than 2 hours per day. This is acceptable to us and will be approved in accordance with 40CFR 423.13(d)(2). No changes to the limits or other permit modifications will be necessary. Part III.B.4. requires Georgia Power to develop an appropriate reporting format. Any biological studies or continuous TRC time and concentration monitoring can be done at the company's discretion.

3. Fact Sheet/Rationale

These comments have been incorporated where appropriate.

A copy of the revised draft permit and Georgia Powers' July 29, 1986 letter are enclosed. All objections and comments have been addressed. We intend to issue the permit in 30 days.

Sincerely,

Harold

Harold F. Reheis, P.E.
Assistant Director

HFR:ths

Enclosure

cc: Georgia Power Company

Mtg. w/ Georgia
re Scherer etc
10/8/86

Nolton Johnson
Tom Hopkins
Vor Saty
Vincent
Lisa Calhoun
CHK

Ga Power Proposes dechlorination on cooling tower (combined) with dechlorination and also on service water.
Ga EPD does not want to require Ga Power to install/use these facilities.
Issue is "Cannot" vs "does not want to"

Please attach this form on front of your new file

Margret - this is a NEW file that needs a bar code assigned and entered into the system.

Please create a file with the following information:

File I. D. # GA 0035564

File Description Plant Scherer

Series # 2053 *(Example: 0232A)*

_____ *No other volumes for this number exist/or*

✓ *there are other volumes for this number*

File Creation Date: M 10 *D* 6 *Y* 2008

Recipent: Karrie Jo Shell **ext** 24308

614794