

No comments were received on the initial 208 work plan at the public hearing which was held on December 17, 1979. The water quality standards (Chapter 6 of the Plan) are currently being revised and the silviculture section of Chapter 5 is presently being studied and evaluated by a special task force for possible revisions. The wasteload allocation studies for Segment 2D have not been performed and are the subject of a separate minute order at this meeting. The statement on page 339 of Chapter V of the 208 Plan which states that the State Health Department is the lead agency for subsurface disposal is being clarified so it will not be interpreted to include the underground injection control (UIC) program which is administered by this Department.

Considering the above the Commission hereby approves the initial Water Quality Management Plan with the exception of Chapter 6 and the Silviculture section of Chapter 5 which are conditionally approved until the abovenoted revisions and studies have been completed. The Commission also recommends to the Governor that he approve the Plan with conditional approval to be given to the items noted above.

COMMISSIONERS

[Handwritten signatures of commissioners]

SUBMITTED BY: Hugh G. Hannah

DATE PASSED: 1-25-80

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ARKANSAS COMMISSION ON POLLUTION CONTROL AND ECOLOGY

PUBLIC HEARING

TO RECEIVE COMMENTS ON THE PROPOSED INITIAL STATE
WATER QUALITY MANAGEMENT PLAN (208 PLAN)

and

PROPOSED INTERIM REVISIONS TO THE
STATE WATER QUALITY STANDARDS

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Arkansas Game and Fish Commission Auditorium
No. 2 Natural Resources Drive
Little Rock, Arkansas

Monday, December 17, 1979
1:03 p.m.

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SANDRA J. PALMER
Certified Shorthand Reporter
North Little Rock, Arkansas
Certificate C-2083

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1 ARKANSAS COMMISSION ON POLLUTION CONTROL AND ECOLOGY:

- 2 JIM BROOKS, Agriculture, Chairman
- 3 JOHN SAXTON, Director, Soil and Water Resources Division,
Vice Chairman, (not present)
- 4 CLYDE BROYLES, Industry (not present)
- 5 R. A. DUMAS, Oil and Gas Commission (not present)
- 6 BILLY FREE, Municipalities
- 7 BILL GRESHAM, Secretary
- 8 DR. ROBERT YOUNG, Arkansas Department of Health
(not present)
- 9 NORMAN WILLIAMS, Geology Commission (not present)
- 10 RALPH WILLIAMS, Mining (not present)

11 ---o---

12 J. M. McHANEY, Attorney at Law, First National Building,
Little Rock, Arkansas

13 ---o---

14 MEMBERS OF DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY:

- 15 JARRELL E. SOUTHALL, Director
- 16 BECKY BUCHANAN
- 17 WARREN BRAINARD
- 18 DAVE CRINER
- 19 RICH GARRETT
- 20 HUGH HANNAH
- 21 CYNTHIA JACKSON
- 22 JOYCE SADLER
- 23 DOUG SZENHER

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P R O C E E D I N G S

1
2 CHAIRMAN BROOKS: Ladies and gentlemen, we are
3 here today to receive comments on the proposed interim
4 revisions to the Arkansas Water Quality Standards and the
5 proposed statewide water quality management plan, better
6 known as 208.

7 My name is Jim Brooks. I am chairman of the
8 Pollution Control and Ecology Commission. To my left is
9 Mr. Jarrell Southall, our director. To his left is Mr.
10 Billy Gresham, one of our commissioners representing the
11 Forestry Commission. To his left is Mayor Billy Free who
12 represents the municipalities on the Commission.

13 To my right is our counsel Mr. James McHaney.

14 I would like to at this time introduce some
15 guests that we are honored to have. We have Miss Betty
16 Woods from Senator Pryor's office. Welcome, Betty.

17 And Mr. Bill Black from the EPA. Welcome, Bill.

18 At this time Doug Szenher will read a statement.

19 MR. SZENHER: Chairman Brooks, members of the
20 Commission, ladies and gentlemen, this is the public notice
21 announcing both of today's hearings.

22 The Arkansas Commission on Pollution Control
23 and Ecology will hold a public hearing December 17, 1979
24 to receive comments on the proposed initial state Water
25 Quality Management Plan, 208 Plan, and proposed interim

1 revisions to the state Water Quality Standards. The hearing
2 will begin at 1:00 p.m. in the state Game and Fish
3 Commission Auditorium, No. 2 Natural Resources Drive, Little
4 Rock.

5 The proposed 208 Plan is the final version of
6 a draft document considered in a public hearing May 25 at
7 Little Rock. The proposal developed according to Section
8 208 of the Federal Water Pollution Control Act and
9 regulations adopted pursuant to the section outlines
10 Arkansas' water quality management planning efforts for the
11 first year of a 20-year plan to achieve national water
12 quality goals as outlined in the federal law. The plan
13 will be reviewed each year and will be revised as needed.

14 The proposed revisions to the state Water
15 Quality Standards are being considered as an interim measure
16 to deal with several areas needing immediate attention.
17 The interim proposals do not affect plans for a major review
18 of the existing standards, which is expected during 1980.

19 The proposed interim revisions involve adoption
20 of standards for the discharge of certain toxic substances
21 and the establishment of a policy regarding wastewater
22 treatment requirements for discharge to intermittent or
23 ephemeral streams, streams with little or no flow during
24 certain times of the year, and establishment of temporary
25 exemptions from the standards for Coffee Creek in Ashley

1 County.

2 Copies of the proposed final 208 Plan and the
3 proposed interim revisions to the Water Quality Standards
4 will be available after November 17, 1979 at information
5 depositories in the following locations: Arkansas
6 Department of Pollution Control and Ecology, 8000 National
7 Drive, Little Rock; Clark County Library, 609 Caddo,
8 Arkadelphia; White River Regional Library, 368 East Main,
9 Batesville; Blytheville Library; Public Library of Camden and
10 Ouachita County, 120 Harrison Southwest, Camden; Ozarks
11 Regional Library Headquarters, 217 East Dickson, Fayetteville;
12 Fort Smith Public Library, 61 South Eighth Street; Little
13 Rock Public Library, 700 Louisiana Street; Magnolia Public
14 Library, 220 East Main Street; Mena Public Library, 410
15 Eighth Street; Southeast Arkansas Regional Library, 233
16 South Main Street in Monticello; Mountain Home Public
17 Library, West Seventh Street; City of Ozark Public Library,
18 407 West Market Street and West Memphis Public Library,
19 Avalon and Olive Streets.

20 Oral statements will be heard at the hearing,
21 but for the accuracy of the record all comments should be
22 submitted in writing at the time of the hearing.

23 Dated the 7th day of November 1979. Signed,
24 Jarrell E. Southall, Director of the Arkansas Department of
25 Pollution Control and Ecology.

1 (See Attachment 1.)

2 MR. SZENHER: This notice was published in two
3 newspapers of statewide circulation.

4 In addition, information regarding the hearing
5 was sent to members of the Legislative Council, the state
6 Policy Advisory Committee on Environmental Management
7 Planning, the Management Advisory Committee, the Commission
8 on Pollution Control and Ecology; the federal Environmental
9 Protection Agency.

10 Also statewide news release announcing the
11 hearing was sent to approximately 300 news outlets consisting
12 of newspapers, radio and television stations throughout
13 Arkansas.

14 (See Attachment 2.)

15 MR. SZENHER: Thank you, Mr. Chairman.

16 CHAIRMAN BROOKS: Thank you, Doug.

17 It is my understanding that this hearing is
18 going to be split in two segments: one, which will be
19 first will be the 208 Plan and the second is the Water
20 Quality Standards. Is that correct?

21 MR. SOUTHALL: Yes.

22 CHAIRMAN BROOKS: Okay.

23 Mr. Hugh Hannah would like to make a statement
24 now.

25 MR. HANNAH: I will just address these remarks

1 to the first part of the hearing. I will have some more
2 for the Water Quality Standards when it comes up.

3 This initial 208 Plan constitutes Phase I of the
4 208 planning process.

5 As many of you are aware, an initial public
6 hearing was held on this plan on May the 25th, 1979. At
7 that time it was noted that a future hearing would be
8 necessary because of the unavailability of certain supporting
9 documents which led to some of the conclusions in the plan.
10 This information has now become available and was placed in
11 depositories throughout the state for review.

12 Also changes made to respond to public comments
13 at the first hearing as well as to address EPA comments have
14 been incorporated into the plan which was placed in the
15 depositories November 16, 1979.

16 The first hearing was held to meet certain
17 requirements of federal law and regulations, and the
18 submission was known to be incomplete. Since that time the
19 changes incorporated are intended to provide enough
20 information to satisfy the conditions for initial acceptance
21 of the plan.

22 Chapter VI of the plan contains a proposed
23 revision to the Water Quality Standards which was written
24 before the interim water quality regulations, which are the
25 subject of a separate hearing today, were formulated and

1 which were placed in the depositories at the same time as
2 the plan material.

3 Chapter VI therefore is superseded by the
4 standards proposed in the next hearing. As will be explained
5 in that hearing, these interim standards will be subject to
6 even further revisions in the next few weeks.

7 Continued updating and improving of the plan
8 is contemplated.

9 A hearing was held November 7, 1979 on a
10 workplan for utilization of 1979 funds. Another hearing
11 will be held on a further workplan in the early part of
12 1980 for expenditure of 1980 funds.

13 Implementation of nonpoint source best management
14 practices and continued elimination of point source
15 pollution will follow the acceptance of this initial plan.

16 The future information developed will provide
17 for more complete knowledge of the cause-effect relationship
18 in many instances and consequently may lead to technological
19 advances that are not presently utilized.

20 As future revisions and changes are incorporated
21 they will be subjected to further public hearings similar
22 to the one here today.

23 Thank you for your attendance and any comments
24 which you may wish to make.

25 (See Attachment 3.)

1 CHAIRMAN BROOKS: Thank you, Mr. Hannah.

2 The first party wishing to comment is Mr. John
3 Powell representing Union Carbide Corporation.

4 MR. POWELL: Mr. Chairman, I would like to
5 speak in the water quality phase rather than the plan.
6 Although my comments are for both, they are predominately
7 for the water quality.

8 CHAIRMAN BROOKS: Okay.

9 MR. POWELL: I will speak either way, whichever
10 suits you.

11 DIRECTOR SOUTHALL: You want to speak on the
12 standards rather than the 208 Water Quality Plan?

13 MR. POWELL: Yes.

14 DIRECTOR SOUTHALL: We will just waite.

15 CHAIRMAN BROOKS: We will hold this in abeyance,
16 I guess.

17 Are there any others who would like to speak
18 on the 208 Plan?

19 (No response.)

20 CHAIRMAN BROOKS: Okay. Mr. Hannah, then you
21 wanted to read another statement for the Water Quality
22 Standards.

23 MR. HANNAH: The Water Quality Standards which
24 are the subject of this hearing are considered by the
25 department to be interim standards. In fact, a more

1 extensive revision which more distinctly defines procedures
2 and use classifications is currently partially completed and
3 should be ready for a further hearing within the next few
4 weeks.

5 These standards also differ considerably from
6 the proposed standards included in Chapter VI of the 208
7 Plan which were proposed much earlier than this current
8 version.

9 The purpose of these interim standards is to
10 provide the department with a mechanism to deal with
11 critical problems that require immediate action in order to
12 maintain an orderly program in construction grants and
13 permitting, two of the more important functions of the
14 water division.

15 Very briefly, the proposed changes encompass
16 three items as follows.

17 One. Attachment I, which would exempt Coffee
18 Creek, the receiving stream for Georgia-Pacific wastewaters
19 from certain criteria as currently defined in the standards
20 because of the intermittent, ephemeral and manmade nature of
21 certain portions of the stream.

22 It would provide for protection from nuisances,
23 health hazards, taste and odor, solids, floating materials
24 and deposits of toxic materials in quantities that would
25 be toxic to human, animal, plant or aquatic life or would

1 cause interference with normal propagation of aquatic life.
2 The justification for this change, Attachment II, is based
3 upon the contingent that Coffee Creek was misclassified in
4 the original standards.

5 Attachment III, specific criteria for seven
6 listed materials, this is intended to be a start toward
7 setting limits on other toxic materials as better information
8 and technology becomes available. The limits are set on
9 detection limits that can be accomplished by the chemistry
10 laboratories of the department.

11 Attachment IV, a standard for intermittent and
12 ephemeral streams as well as drainage ditches which would
13 permit the department more flexibility for setting effluent
14 requirements necessary to protect these streams for existing
15 instream water uses as well as protection of downstream
16 water uses, protection of subsurface waters and to prevent
17 a public health hazard.

18 The above provision should provide water quality
19 protection for existing uses of the receiving stream or
20 streams, yet provide for several million dollars in economics
21 to some of the municipalities which are presently faced with
22 extremely high levels of treatment under existing standards.

23 It is recognized that a procedure for defining
24 and evaluating these streams must be developed, and this
25 will be a part of department activities over the next few

1 weeks.

2 Thank you for your attendance and any remarks
3 you would care to make.

4 (See Attachment 4.)

5 CHAIRMAN BROOKS: Thank you, Mr. Hannah.

6 We would now receive comments on these standards.
7 Mr. John S. Carter of Georgia-Pacific.

8 MR. CARTER: Thank you, Mr. Chairman. My name
9 is Johnny Carter. I am environmental control supervisor
10 for the Crossett paper operation of Georgia-Pacific
11 Corporation. We appreciate the opportunity to comment on
12 the proposed changes to the water quality standards in
13 Regulation II.

14 I would like to introduce Jim Garrett who is
15 an attorney who was hired to help in this presentation
16 today.

17 First I would like to comment on the proposed
18 justification language with the exception of Coffee Creek
19 from the specific criteria applicable to Class B stream
20 and all general criteria.

21 It should be recognized that replacement criteria,
22 which Mr. Hannah mentioned, have been provided for in the
23 justification document.

24 Allow me to refresh your memory and provide an
25 historical background for Georgia-Pacific's comments. We

1 first began using Coffee Creek in 1937 when the papermill
2 began its operations in Crossett.

3 In Exhibit 1, which is attached to your right
4 up here, there is a map of the Coffee Creek Mossy Lake
5 system.

6 In the beginning this Coffee Creek and the Mossy
7 Lake area provided adequate treatment for the effluent and
8 the paper operations with some smaller dams added on the
9 lower end of Mossy Lake. These dams were installed by the
10 Crossett Company or by the Georgia-Pacific -- later Georgia-
11 Pacific.

12 And as the operation in Crossett operations got
13 larger or expanded it was necessary to expand this Mossy
14 Lake and Coffee Creek system. Our first major change came
15 in 1956 with the addition of the R-1 basin. That is this
16 basin here (referring to drawing). This was made by forming
17 a dam across the Coffee Creek.

18 When this retention and stabilization basin
19 started filling with solids in the upper end, it became
20 apparent that a solids removal system would be required.
21 Consequently, two earthen settling basins were constructed
22 adjacent to the Coffee Creek in that area. And they were
23 successful in taking the suspendable solids from the effluent,

24 As further expansion and more stringent regulations
25 came about it was necessary to upgrade the system again, and

1 the next step was completed in 1970 with the addition of a
2 300-foot diameter clarifier in this area and 15 50-horsepower
3 aerators in the area of the lagoon thereby converting the
4 stabilization to an intermediate stabilization basin.

5 Subsequently more aeration has been added to
6 the basin as needed to meet the regulations, and the current
7 level now is 18 75-horsepower.

8 In support of the department's staff's
9 justification for the exception of Coffee Creek I would like
10 to present the following exhibits.

11 Of course, Exhibit 1 is this drawing here.

12 Exhibit 2 is a series of photographs with the
13 dry stream bed portion in this area taken where the original
14 channel has been abandoned and along here below R1 these
15 photographs demonstrate the intermittent nature of the
16 stream, and they show that the stream bed is dry.

17 Second, Exhibit 3 contains flow data for August,
18 September and October of 1979. These show that during
19 August 47.4 milligrams per day of effluent was discharged
20 in the R1 basin.

21 At that same period 48 million gallons was
22 discharged in Mossy Lake.

23 In September the flow from R1 was 47.9 and from
24 Mossy Lake 48.5.

25 In October the discharge in R1 was 46.5 and

1 Mossy Lake it was 45.6 milligram per day.

2 Since there is no significant difference in the
3 flows leaving R1 and that entering the river, we submit
4 there is support for the department's finding that the flow
5 in Coffee Creek, except for treated wastewater, is
6 intermittent or ephemeral in nature.

7 Exhibit 4 shows that the biochemical oxygen
8 demand levels leaving our aerated lagoon has decreased each
9 year for the last five years.

10 The following average concentrations of BOD are
11 for each year. 1975 the average annual BOD concentration
12 leaving the area of the lagoon was 76 parts per million;
13 1976, 70 parts per million; 1977, 47 parts per million;
14 1978, 33 parts per million; 1979, the first 10 months of
15 1979 was 26 parts per million.

16 In addition to these observations we would like
17 to call your attention to an error that exists on the graph
18 of the BOD levels in the Coffee Creek plot which was
19 attached to the state's proposed justification document on
20 the BOD plot.

21 As you can see, the numbers used in preparing the
22 graph were generally uniform decreases with one very notable
23 and obvious exception, and that number was reflected in
24 early 1976 and should have been recorded as greater than
25 63, but instead was interpreted by the programmer as 763.

1 With that correction the graph will clearly illustrate the
2 improving water quality for the BOD criteria over the past
3 five years.

4 At this time I would like to submit as Georgia-
5 Pacific's Exhibit 5 these photographs which were attached
6 to the state's proposed justification document as evidence
7 of the improving water quality in Coffee Creek in the past
8 five years, which in turn reflects the improved levels of
9 treatment which are being achieved by Georgia-Pacific at
10 Crossett.

11 Exhibit 6 contains an analysis of samples that
12 were taken from three areas on the abandoned Coffee Creek
13 channels, that is, in the area below here.

14 In all three places the level of oxygen, of
15 dissolved oxygen, is two parts per million or lower. This
16 substantiates Georgia-Pacific's position that Coffee Creek
17 was never of Class B quality and therefore could never
18 achieve Class B standards.

19 In 1959 sodium analyses were made on water
20 levels in three different locations surrounding the area of
21 the lagoon, the R1 basin here. Levels of sodium were found
22 to be 83, 26 and 32 parts per million on some observation
23 wells at that time.

24 The wells in this same vicinity were sampled
25 again in 1979 and the levels of sodium were 28, 17 and 20

1 respectively, in each case showing a reduction in sodium
2 ion content.

3 Exhibit 7 indicates that the groundwater
4 contamination is not occurring on Georgia-Pacific's
5 wastewater treatment system since the sodium ion level
6 concentrations were lower in all three areas.

7 Sodium concentrations would increase if the
8 effluent, which is a high sodium effluent, was percolating
9 into the groundwater.

10 EPA recently directed that compliance with the
11 effluent limitations be measured at the point of discharge
12 from R1, taking into account normal deviations within the
13 mixing zone.

14 While Georgia-Pacific disagrees with the EPA
15 directive and has made this one of the objectives or
16 subjects of an adjudicatory hearing, it submitted that
17 evidence supports the state's determination that Coffee
18 Creek is intermittent in nature and therefore the absence
19 of a continuous flow in Coffee Creek, rather than treated
20 wastewater precludes mixing in any area of the creek.

21 It is further submitted that the mixing zone
22 should be designated as some area contiguous to the mouth
23 of Coffee Creek at its point of confluence with the Ouachita
24 River.

25 At this time I want to recognize some people

1 that came up from Crossett and Ashley County who are here
2 today in support of Georgia-Pacific's effort to have the
3 exception granted for Coffee Creek.

4 If you would stand when I call your name, please
5 Tom Streetman. Tom is president of the Crossett Chamber of
6 Commerce. Mayor Vaskell Carter, the City of Crossett.
7 Ashley County Judge Johnnie Bolin.

8 These gentlemen and various other citizens of
9 Crossett and Ashley County, people they represent, have been
10 actively working with G-P for many months to help resolve
11 the Coffee Creek issue.

12 Finally, we wish to comment that our review of
13 Attachment IV, we are now leaving the exception language
14 and going to the Attachment IV of the proposed revisions
15 to the Arkansas Water Quality Standards, regulation two,
16 reveals a potential ambiguity between Subsection (c)(3)(A)
17 and Subsection (c)(3)(C).

18 The possible conflict between these provisions
19 could be resolved by modifying the latter, (c)(3)(C) to
20 read as follows. "Existing instream uses are (i) those
21 beneficial and demonstrable uses of a stream which are
22 currently being attained or which have been attained during
23 the preceding five years, or (ii) those which are assumed
24 under Subsection (c)(3)(A) above; and includes such uses
25 as a raw water source for public, industrial or agricultural

1 water supplies; primary or secondary contact recreation;
2 and protection and propagation of fish, shellfish and
3 wildlife."

4 Mr. Chairman, I will be happy to try to answer
5 any questions.

6 MR. GARRETT: If I could at this time I would
7 like to introduce the original exhibits that I have copies
8 of and ask that it be entered into the record.

9 (See Attachment 5.)

10 CHAIRMAN BROOKS: That will be fine.

11 Does anyone have any questions?

12 (No response.)

13 CHAIRMAN BROOKS: Mr. John Powell representing
14 Union Carbide Corporation.

15 MR. POWELL: I am John Powell with Union Carbide
16 in Hot Springs, Arkansas, where Union Carbide has a mining
17 operation.

18 I would like to comment today on the plan as it
19 relates to the Water Quality Standards. The comments that
20 I am making today are basically a reiteration of those same
21 ones we made in May, but I would like to bring them to the
22 attention of the Commission.

23 One problem we see in the plan as it relates
24 to the Water Quality Standards as proposed originally was
25 that major changes, significant changes, can be made in the

1 standards without the benefit of a hearing or public comment
2 because of certain phrases that were put into the Section
3 5(k).

4 We request that the requirement for a hearing
5 and public comments must be spelled out in the Water Quality
6 Standards themselves.

7 The plan also under Chapter VI establishes
8 guidelines for instream standards and processed effluent
9 standards.

10 I am sure that most of us are aware that
11 guidelines turn into regulations very easily, and it is our
12 feeling that these guidelines, the rationale for establishing
13 them, must be expressed someplace. They could not just be
14 included or referred to the Red Book.

15 Also, using the guideline concentrations in turn
16 to determine the maximum permissible concentrations and
17 effluents discharged to sewers and streams is not a
18 satisfactory procedure in our view. It fails to take into
19 account the nature of the discharge and/or the nature of
20 the receiving water.

21 We suggest that the effluent guidelines be
22 deleted from the water quality management program and
23 effluent standards be determined by the department on a
24 case-by-case basis after due consideration of all factors
25 are given.

1 Guideline values for maximum permissible metals
2 to be discharged into sewers and streams. There appears to
3 be an error in the list, because if one reads what is there,
4 anybody that has got an effluent discharge, like an industry
5 or municipality, the fish have to live in the discharge.
6 And our rationale is explained here. I won't go into that
7 in detail.

8 The third item we wish to have clarified is the
9 guideline limits specified for ammonia. We make reference
10 in our written statement to the fact that these limits we
11 believe are incorrect and should be changed, and we request
12 the department to review the references we state -- we
13 quote.

14 The instream guideline for ammonia is given as
15 .02 milligrams of N per litre.

16 And we indicate that this is no longer an
17 accepted value for all waters based on research done since
18 the completion of the publication of the Red Book, and we
19 also make some references to that literature and propose
20 the following limits for ammonia. This is un-ionized
21 ammonia in microgram of N per litre. We suggest the value
22 of 20 be held for trout and cold water streams and that a
23 value of 100 be adopted for small mouth bass or warm water
24 streams.

25 That is the major comments I have. If anybody

1 has any questions I would be glad to answer them.

2 (See Attachment 6.)

3 CHAIRMAN BROOKS: Any questions?

4 (No response.)

5 CHAIRMAN BROOKS: Thank you, Mr. Powell.

6 Mr. Dennis Massey of the City of Decatur.

7 MR. MASSEY: Gentlemen of the Commission, I am
8 Dennis Massey, the Mayor of Decatur, Arkansas. I wish to
9 make a few comments as to the revision of the plan.

10 We support the Attachment IV to the referenced
11 publication with the following exceptions.

12 Regarding Section (c)(1)(C), we believe an
13 unacceptable health risk is involved in tasting water from
14 drainage ditches or intermittent stream basins where at
15 times the flow is comprised solely of a treated wastewater
16 effluent. Therefore we believe the word "taste" should be
17 deleted.

18 Regarding Section (c)(1)(D), we believe this
19 to be redundant and tending toward causing confusion rather
20 than aiding in the solution of the problems. Therefore,
21 the Subsection (D) should be deleted.

22 Regarding Section (c)(3)(D), we believe this
23 subsection is redundant and should be deleted.

24 We are appreciative of the effort that has gone
25 into the preparation of this proposed revision at issue as

1 a very complex problem of regulation.

2 Unnecessary restriction has potential profoundly
3 adverse economic impact ramifications for much of the state.

4 We urge deliberation and flexibility in arriving
5 at desirable controls. Thank you.

6 (See Attachment 7.)

7 CHAIRMAN BROOKS: Thank you, Mayor Massey.

8 Mr. Gene Reece of the Crafton, Tull and
9 Associates representing the City of Decatur.

10 MR. REECE: Mr. Brooks, and Commission members,
11 the proposed revisions place to a certain extent first and
12 foremost considerations which under some circumstances are
13 largely aesthetic. An implied secondary significance is
14 assigned to the protection of people from injury.

15 We concur that aesthetic considerations are
16 important and desirable to the extent to which they can be
17 afforded.

18 We totally support the effort to improve
19 Regulation No. 2, Section 4(c) as embodied in the proposed
20 revisions of Attachment IV or Attachment IV to the proposed
21 revisions.

22 We are convinced that arriving at workable
23 controls involves a certain amount of trial and error.
24 Further refinement may be necessary and we believe should
25 be a part of the process of regulatory development.

1 At this time we support the proposed Section
2 4(c) revisions with the following exceptions.

3 In Subsection (c)(1) we believe that the term
4 "substances or materials" adequately defines the problem
5 source and that the following words should be deleted.
6 Those words are "including floating debris, oil, scum and
7 other matter."

8 In Subsection (c)(1)(C), we believe the word
9 "taste" should be deleted since it is unreasonable to
10 expect that people would taste drainage water or water in
11 an intermittent stream basin which is comprised solely or
12 substantially of a treated wastewater effluent.

13 We believe Subsection (c)(1)(D) is an unnecessary
14 complication, that such concern is adequately accommodated
15 otherwise and therefore should be deleted.

16 Finally, we believe that Subsection (c)(3)(D)
17 will prove to be contradictory to Subsection (2) -- I am
18 sorry, Subsection (c)(2), and in practice set its own
19 standard as well as result in substantial confusion placing
20 an unnecessary burden on the Commission, on the ADPCE staff
21 and on dischargers to these basins. Therefore we believe
22 that Subsection (c)(3)(D) should be deleted or substantially
23 modified.

24 We will be pleased to elaborate further should
25 that become necessary. Thank you.

1 (See Attachment 8.)

2 CHAIRMAN BROOKS: Thank you, Mr. Reece.

3 Mr. Bob Bogard representing the Arkansas
4 Federation of Water and Air Users.

5 MR. BOGARD: Mr. Chairman, members of the
6 Commission, my name is Bob Bogard. I am executive director
7 of the Arkansas Federation of Water and Air Users, Inc., an
8 industrial environmental association.

9 We are grateful for this opportunity to comment
10 on the proposed revisions to the Arkansas Water Quality
11 Standards Regulation No. 2.

12 The Federation of Water and Air Users is a
13 private, nonprofit membership organization dedicated to
14 efficient management of our natural resources and protection
15 of our environment. Our membership is comprised primarily
16 of industries that have operations in Arkansas and which
17 hold one or more environmental permits from the Department
18 of Pollution Control or the Environmental Protection Agency
19 or both. Current membership numbers more than 140
20 representing some 200 separate and distinct industrial
21 operations throughout the state.

22 The Water Quality Committee of the federation
23 has reviewed the proposed revisions to the Water Quality
24 Standards Regulation No. 2. The federation wholeheartedly
25 supports the proposed revisions and strongly urges the

1 Commission to adopt them.

2 We believe the revisions offer a realistic
3 approach and will preserve the state's water quality while
4 at the same time providing the flexibility needed by the
5 regulatory body to allow for continued economic and
6 industrial growth that is compatible with environmental
7 protection.

8 The proposed justification for the exception to
9 Coffee Creek speaks for itself. The exception is duly
10 justified and we believe long overdue.

11 The intermittent stream policy is something
12 that the state has needed for a long time, and we are glad
13 to see it.

14 The Federation of Water and Air Users wishes
15 to commend the staff of the Department of Pollution Control
16 and Ecology for forging ahead with these revisions to the
17 Water Quality Standards.

18 We appreciate this opportunity to comment on
19 the proposed regulations. Thank you very much.

20 (See Attachment 9.)

21 CHAIRMAN BROOKS: Thank you, Mr. Bogard.

22 Is there anyone else wishing to comment?

23 (No response.)

24 CHAIRMAN BROOKS: Anyone up here wish to
25 comment?

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(No response.)

CHAIRMAN BROOKS: Thank you, ladies and gentlemen, for coming out and giving us your views.

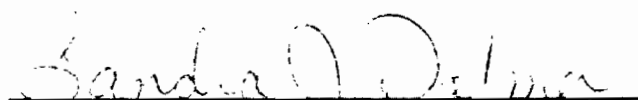
I guess we will adjourn.

(Whereupon, at 2:44 p.m. the above-entitled hearing was concluded.)

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C E R T I F I C A T E

1
2 I, Sandra J. Palmer, a Certified Shorthand
3 Reporter, do hereby certify that the matters contained
4 herein concerning the public hearing before the Arkansas
5 Commission on Pollution Control and Ecology were taken by
6 me in machine shorthand and were thereafter reduced to
7 typewritten form by me or under my direction and
8 supervision; that the transcript is a true and correct
9 record, to the best of my understanding and ability, of
10 the proceedings had at the time and place aforementioned.

11
12 
13 Sandra J. Palmer, CSR

14 ---0---

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PUBLIC NOTICE

The Arkansas Commission on Pollution Control and Ecology will hold a public hearing December 17, 1979, to receive comments on the proposed initial state Water Quality Management Plan (208 Plan) and proposed interim revisions to the state Water Quality Standards. The hearing will begin at 1:00 p.m. in the state Game and Fish Commission auditorium, No. 2 Natural Resources Drive, Little Rock.

The proposed 208 Plan is the final version of a draft document considered in a public hearing May 25 at Little Rock. The proposal, developed according to Section 208 of the Federal Water Pollution Control Act and regulations adopted pursuant to the section, outlines Arkansas' water quality management planning efforts for the first year of a 20-year plan to achieve national water quality goals as outlined in the federal law. The plan will be reviewed each year and will be revised as needed.

The proposed revisions to the state Water Quality Standards are being considered as an interim measure to deal with several areas needing immediate attention. The interim proposals do not affect plans for a major review of the existing standards, which is expected during 1980.

The proposed interim revisions involve adoption of standards for the discharge of certain toxic substances; establishment of a policy regarding wastewater treatment requirements for discharge to intermittent or ephemeral streams (streams with little or no flow during certain times of the year); and establishment of temporary exemptions from the standards for Coffee Creek in Ashley County.

Copies of the proposed final 208 Plan and the proposed interim revisions to the Water Quality Standards will be available after November 17, 1979, at information depositories in the following locations:

Arkansas Department of Pollution Control and Ecology, 8001 National Drive, Little Rock
Clark County Library, 609 Caddo, Arkadelphia
White River Regional Library, 368 E. Main, Batesville
Blytheville Public Library, 200 N. Fifth
Public Library of Camden and Ouachita County, 120 Harrison SW, Camden
Ozarks Regional Library Headquarters, 217 E. Dickson, Fayetteville
Fort Smith Public Library, 61 S. Eighth
Little Rock Public Library, 700 Louisiana
Magnolia Public Library, 220 E. Main
Mena Public Library, 410 Eighth
Southeast Arkansas Regional Library, 233 S. Main, Monticello
Mountain Home Public Library, West Seventh Street
City of Ozark Public Library, 407 W. Market
West Memphis Public Library, Avalon and Olive Streets

Oral statements will be heard at the hearing, but for the accuracy of the record, all comments should be submitted in writing at the time of the hearing.

Dated this seventh day of November, 1979

Jarrell E. Southall, Director
Arkansas Department of Pollution Control and Ecology



STATE OF ARKANSAS
DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
8001 NATIONAL DRIVE
LITTLE ROCK, ARKANSAS 72209

intermittent 2

NEWS RELEASE

For release on or after:
December 9, 1979

Contact: Doug Szenher
Information Officer
(501) 371-1701

WATER QUALITY STANDARDS, MANAGEMENT PLAN TOPICS OF PUBLIC HEARING

The Arkansas Commission on Pollution Control and Ecology will hold a public hearing Dec. 17 at Little Rock to receive comments on proposed interim revisions to the Arkansas Water Quality Standards and the proposed statewide water quality management plan (208 Plan). The hearing will begin at 1 p.m. in the state Game and Fish Commission auditorium, No. 2 Natural Resources Drive.

The proposed changes in the water quality standards, which will serve as temporary revisions until a more thorough review is conducted next year, involve special provisions for Coffee Creek in Ashley County, standards for intermittent or ephemeral streams and ditches, and discharge limits for certain toxic substances.

The proposed revisions would exempt Coffee Creek from all general and specific water quality standards except those necessary to prevent unreasonable interference with existing stream uses or interference with normal propagation of aquatic life. Included in the proposal are prohibitions against the discharge of materials which would create a nuisance or threat to public health; substances which would produce excessive odor and taste problems; excessive amounts of solids, floating materials or deposits of a persistent nature; and excessive amounts of toxic substances.

The interim exemptions for Coffee Creek are an attempt to temporarily deal with a problem involving the regulation of the discharge from the Georgia-Pacific paper mill at Crossett.

The federal Environmental Protection Agency previously proposed that Coffee Creek must meet the water quality standards for a Class B stream. The existing state water quality standards list the creek as a Class B stream, but also provide for an exemption from the Class B standard for dissolved oxygen.

Georgia-Pacific representatives contend the stream is classified wrongly, and was put in Class B only because there is no lower stream classification. (Currently, the standards provide only for stream classifications of AA, A and B.) Additionally, company officials contend the portion of Coffee Creek in question should be considered a legitimate part of the mill wastewater treatment system because of modifications to the stream over the past 40 years.

EPA officials have indicated they would accept the proposed interim revisions as a temporary solution to the situation. A long-term solution will be the development of a new Class C designation for streams such as Coffee Creek which have no

--more--

practical use other than to carry industrial wastewater. The development of a new classification will be one of the areas addressed in the extensive review of the water quality standards next year.

The proposed interim revisions set more specific standards for acceptable water quality in intermittent or ephemeral streams (streams with little or no natural flow during some portions of the year) and drainage ditches.

The proposed language prohibits such streams and ditches from receiving material from manmade sources in such amounts which, after considering existing stream uses, would form objectionable deposits; create nuisances; produce objectionable color, taste, odor or lack of clarity; produce undesirable aquatic life or the dominance of nuisance species; cause injuries to humans, animals or plant life; or interfere with existing uses of downstream waters.

The proposal would not require treatment of wastewater effluent to a degree greater than secondary (mechanical and biological treatment, plus chlorination) unless necessary to protect existing uses in the receiving stream or downstream; to protect ground or surface waters; or to prevent a public health hazard.

The proposed revision would not require maintenance of a flow rate or treatment of effluent greater than secondary in order to create or maintain a stream use which would not exist except for the flow of the discharge itself.

The proposed addition of discharge limits for seven toxic substances establishes specific limits in place of existing general criteria.

Specific limits would be established for polychlorinated biphenyls (PCBs), which are used as insulating material for heavy duty electrical equipment such as transformers; benzidine, which is used in some dyes and for certain laboratory processes; and the pesticides aldrin/dieldrin, endrin, toxaphene, chlordane and DDT.

The proposed 208 Plan is the final version of a draft document which was the subject of a May 25 public hearing at Little Rock. A number of revisions have been made in the original proposal, after consideration of comments from the public and the EPA.

The proposed 208 Plan outlines Arkansas' water quality management planning efforts for the first year of a 20-year plan to achieve and maintain national water quality goals as set by federal law. The plan will be reviewed each year and revised as determined necessary.

Page 11 of 3

THIS INITIAL 208 PLAN CONSTITUTES PHASE I OF THE 208 PLANNING PROCESS. AS MANY OF YOU ARE AWARE AN INITIAL PUBLIC HEARING WAS HELD ON THIS PLAN ON MAY 25, 1979. AT THAT TIME IT WAS NOTED THAT A FUTURE HEARING WOULD BE NECESSARY BECAUSE OF THE UNAVAILABILITY OF CERTAIN SUPPORTING DOCUMENTS WHICH LED TO SOME OF THE CONCLUSIONS IN THE PLAN. THIS INFORMATION HAS NOW BECOME AVAILABLE AND WAS PLACED IN DEPOSITORIES THROUGHOUT THE STATE FOR REVIEW.

ALSO CHANGES MADE TO RESPOND TO PUBLIC COMMENTS AT THE FIRST HEARING AS WELL AS TO ADDRESS EPA COMMENTS HAVE BEEN INCORPORATED INTO THE PLAN, WHICH WAS PLACED IN THE DEPOSITORIES NOVEMBER 16, 1979.

THE FIRST HEARING WAS HELD TO MEET CERTAIN REQUIREMENTS OF FEDERAL LAW AND REGULATIONS AND THE SUBMISSION WAS KNOWN TO BE INCOMPLETE. SINCE THAT TIME THE CHANGES INCORPORATED ARE INTENDED TO PROVIDE ENOUGH INFORMATION TO SATISFY THE CONDITIONS FOR INITIAL ACCEPTANCE OF THE PLAN.

CHAPTER VI OF THE PLAN CONTAINS A PROPOSED REVISION TO THE WATER QUALITY STANDARDS WHICH WAS WRITTEN BEFORE THE INTERIM WATER QUALITY REGULATIONS WHICH ARE THE SUBJECT OF A SEPARATE HEARING HERE TODAY WERE FORMULATED AND WHICH WERE PLACED IN THE DEPOSITORIES AT THE SAME TIME AS THE PLAN MATERIAL.

CHAPTER VI THEREFORE IS SUPERSEDED BY THE STANDARDS PROPOSED IN THE NEXT HEARING. AS WILL BE EXPLAINED IN THAT HEARING THESE INTERIM STANDARDS WILL BE SUBJECT TO EVEN FURTHER REVISIONS IN THE NEXT FEW WEEKS.

CONTINUED UPDATING AND IMPROVING OF THE PLAN IS CONTEMPLATED. A HEARING WAS HELD NOVEMBER 7, 1979, ON A WORK PLAN FOR UTILIZATION OF 1979 FUNDS. ANOTHER HEARING WILL BE HELD ON A FURTHER WORKPLAN IN THE EARLY PART OF 1980 FOR EXPENDITURE OF 1980 FUNDS.

IMPLEMENTATION OF NONPOINT SOURCE BEST MANAGEMENT PRACTICES AND CONTINUED ELIMINATION OF POINT SOURCE POLLUTION WILL FOLLOW THE ACCEPTANCE OF THIS INITIAL PLAN.

THE FUTURE INFORMATION DEVELOPED WILL PROVIDE FOR MORE COMPLETE KNOWLEDGE OF THE CAUSE-EFFECT RELATIONSHIP IN MANY INSTANCES AND CONSEQUENTLY MAY LEAD TO TECHNOLOGICAL ADVANCES THAT ARE NOT PRESENTLY UTILIZED.

AS FUTURE REVISIONS AND CHANGES ARE INCORPORATED THEY WILL BE SUBJECTED TO FURTHER PUBLIC HEARINGS SIMILAR TO THE ONE HERE TODAY.

THANK YOU FOR YOUR ATTENDANCE AND ANY COMMENTS WHICH YOU MAY WISH TO MAKE.

THE WATER QUALITY STANDARDS WHICH ARE THE SUBJECT OF THIS HEARING ARE CONSIDERED BY THE DEPARTMENT TO BE INTERIM STANDARDS. IN FACT A MORE EXTENSIVE REVISION WHICH MORE DISTINCTLY DEFINES PROCEDURES AND USE CLASSIFICATIONS IS CURRENTLY PARTIALLY COMPLETED AND SHOULD BE READY FOR A FURTHER HEARING WITHIN THE NEXT FEW WEEKS. THESE STANDARDS ALSO DIFFER CONSIDERABLY FROM THE PROPOSED STANDARDS INCLUDED IN CHAPTER VI OF THE 208 PLAN WHICH WERE PROPOSED MUCH EARLIER THAN THIS CURRENT VERSION.

THE PURPOSE OF THESE INTERIM STANDARDS IS TO PROVIDE THE DEPARTMENT WITH A MECHANISM TO DEAL WITH CRITICAL PROBLEMS THAT REQUIRE IMMEDIATE ACTION IN ORDER TO MAINTAIN AN ORDERLY PROGRAM IN CONSTRUCTION GRANTS AND PERMITTING, TWO OF THE MORE IMPORTANT FUNCTIONS OF THE WATER DIVISION.

VERY BRIEFLY, THE PROPOSED CHANGES ENCOMPASS THREE ITEMS, AS FOLLOWS.

- (1) ATTACHMENT I WHICH WOULD EXEMPT COFFEE CREEK, THE RECEIVING STREAM FOR GEORGIA-PACIFIC WASTEWATERS, FROM CERTAIN CRITERIA AS CURRENTLY DEFINED IN THE STANDARDS BECAUSE OF THE INTERMITTENT, EPHEMERAL AND MANMADE NATURE OF CERTAIN PORTIONS OF THE STREAM. IT WOULD PROVIDE FOR PROTECTION FROM NUISANCES, HEALTH HAZARDS, TASTE AND ODOR, SOLIDS, FLOATING MATERIALS AND DEPOSITS AND TOXIC MATERIALS IN QUANTITIES THAT WOULD BE TOXIC TO HUMAN, ANIMAL, PLANT OR AQUATIC LIFE OR WOULD CAUSE INTERFERENCE WITH NORMAL PROPAGATION OF AQUATIC LIFE. THE JUSTIFICATION FOR THIS CHANGE (ATTACHMENT II) IS BASED UPON THE CONTINGENT THAT COFFEE CREEK WAS MISCLASSIFIED IN THE ORIGINAL STANDARDS.

215-

(2) ATTACHMENT III - SPECIFIC CRITERIA FOR SEVEN LISTED TOXIC MATERIALS. THIS IS INTENDED TO BE A START TOWARD SETTING LIMITS ON OTHER TOXIC MATERIALS AS BETTER INFORMATION AND TECHNOLOGY BECOMES AVAILABLE. THE LIMITS ARE SET ON DETECTION LIMITS THAT CAN BE ACCOMPLISHED BY THE CHEMISTRY LABORATORIES OF THE DEPARTMENT.

(3) ATTACHMENT IV - A STANDARD FOR INTERMITTENT AND EPHEMERAL STREAMS AS WELL AS DRAINAGE DITCHES WHICH WOULD PERMIT THE DEPARTMENT MORE FLEXIBILITY FOR SETTING EFFLUENT REQUIREMENTS NECESSARY TO PROTECT THESE STREAMS FOR EXISTING INSTREAM WATER USES AS WELL AS PROTECTION OF DOWNSTREAM WATER USES, PROTECTION OF SUBSURFACE WATERS AND TO PREVENT A PUBLIC HEALTH HAZARD.

THE ABOVE PROVISION SHOULD PROVIDE WATER QUALITY PROTECTION FOR EXISTING USES OF THE RECEIVING STREAM OR STREAMS YET PROVIDE FOR SEVERAL MILLION DOLLARS IN ECONOMICS TO SOME OF THE MUNICIPALITIES WHICH ARE PRESENTLY FACED WITH EXTREMELY HIGH LEVELS OF TREATMENT UNDER EXISTING STANDARDS.

IT IS RECOGNIZED THAT A PROCEDURE FOR DEFINING AND EVALUATING THESE STREAMS MUST BE DEVELOPED AND THIS WILL BE A PART OF DEPARTMENT ACTIVITIES OVER THE NEXT FEW WEEKS.

THANK YOU FOR YOUR ATTENDANCE AND ANY REMARKS YOU MAY CARE TO MAKE.

Attachment 5

Presentation of Georgia-Pacific Corporation
to the Commission on Pollution Control and Ecology
December 17, 1979, Public Hearing

My name is Johnny Carter, Environmental Control Supervisor for Georgia-Pacific Corporation at Crossett. We appreciate the opportunity to comment on the proposed changes to water quality criteria in Regulation No. 2.

First, I would like to comment on the proposed justification with the exception of Coffee Creek from those specific criteria applicable to Class B streams and all general criteria. It should be recognized that replacement criteria have been provided for in the justification document.

Allow me to refresh your memory and provide an historical background for Georgia-Pacific's comments: We first began using Coffee Creek (refer to drawing) in 1937 when the paper mill began operating in Crossett. Exhibit (1) in the copy of my statement is a reproduction of this drawing. For several years the Mossy Lake-Coffee Creek system provided adequate treatment. This was accomplished with the assistance of small dams on the lower edge of Mossy Lake which were installed by Georgia-Pacific. As the operation expanded, it became necessary to enlarge the effluent treatment system.

Our first major change came in 1956 with the addition of the R-1 basin (refer to drawing). When this retention and stabilization lagoon began filling with solids, it became apparent that a solids removal system was necessary. Consequently, two earthen settling basins were constructed adjacent to the Coffee Creek channel. They were successful in removing settleable solids ahead of the R-1 stabilization basin.

As further expansion and more stringent regulations came about, it was necessary to upgrade the system again. The next step was completed in 1970 with the addition of a 300-foot diameter primary clarifier and 15 50-hp

aerators in the R-1 basin, thereby converting it to an aerated stabilization lagoon. Subsequently, more aeration was added up to the current quantity of 1,875 hp.

In support of the Department staff's justification for exception of Coffee Creek, I would like to present the following exhibits:

1. First, Exhibit (2) is a series of photographs of the dry stream bed of Coffee Creek taken where the original channel has been abandoned below R-1. These photographs demonstrate the intermittent nature of the stream.
2. Second, Exhibit (3) contains flow data for August, September and October of 1979 showing that:
 - (a) August flow from R-1 was 47.4 MGD and flow from Mossy Lake was 48.0 MGD;
 - (b) September flow from R-1 was 47.9 MGD and flow from Mossy Lake was 48.5 MGD;
 - (c) October flow from R-1 was 46.5 MGD and flow from Mossy Lake was 45.6 MGD.

Since there is no significant difference in the flows leaving R-1 and that entering the river, we submit there is support for the Department's finding that the flow of Coffee Creek, except for treated wastewater, is intermittent or ephemeral in nature.

3. Exhibit (4) shows that biochemical oxygen demand (BOD) levels leaving our aerated lagoon (R-1) have decreased each year for the last five years. The following are average concentrations of BOD for each year:

1975 - 76 ppm
1976 - 70 ppm
1977 - 47 ppm
1978 - 32 ppm
1979 - 26 ppm (first ten months)

4. In addition to these observations, we would like to call your attention to an error that exists on the graph of BOD levels in Coffee Creek which was attached to the State's proposed justification document. As you can see, the numbers used in preparing that graph were generally uniform and decreasing, with one very notable and obvious exception. The number reflecting "early 1976" should have been recorded as "greater than 63," but was instead interpreted by the programmer as "763." With that correction, this graph will clearly illustrate the improving water quality for the BOD criterion over the past five years. At this time, we would like to submit as Georgia-Pacific's Exhibit (5) those graphs which were attached to the State's proposed justification document as evidence of the improving water quality in Coffee Creek over the past five years, which in turn reflect the improved levels of treatment which are being achieved by Georgia-Pacific at Crossett.
 5. Exhibit (6) contains an analysis of samples that were taken from three areas in the abandoned Coffee Creek channel and tested for dissolved oxygen. In all three places, the level of oxygen is 2.0 ppm or lower. This substantiates Georgia-Pacific's position that Coffee Creek was never of Class B quality and, therefore, could never achieve Class B standards.
-

6. In 1959, sodium analyses were made on water wells at three different locations surrounding the R-1 basin. Levels of sodium were found to be 83, 26, and 32 ppm. Wells in the same vicinity in 1979 show levels of 28, 17 and 20 ppm, respectively. Exhibit (7) indicates that groundwater contamination is not occurring on Georgia-Pacific's wastewater treatment system since the sodium levels are lower in all three areas. Sodium concentrations would increase if the effluent was percolating into the groundwater.

The EPA has recently directed that compliance with effluent limitations be measured at the point of discharge from R-1, taking into account normal deviations within the mixing zone. While Georgia-Pacific disagrees with this EPA "directive" and has made this one of the subjects of an adjudicatory hearing, it is submitted that the evidence supports the State's determination that Coffee Creek is intermittent in nature and therefore, the absence of a continuous flow in Coffee Creek, other than treated wastewater, precludes mixing in any area of the creek. It is further submitted that the mixing zone should be designated as some area contiguous to the mouth of Coffee Creek at its point of confluence with the Ouachita River.

At this time, I want to recognize three people from Crossett and Ashley County who are here today in support of Georgia-Pacific's effort to have the exception granted for Coffee Creek.

They are: Mr. Tom Streetman, President, Crossett Chamber of Commerce;
Mayor Vaskell Carter, City of Crossett;
Ashley County Judge Johnnie Bolin.

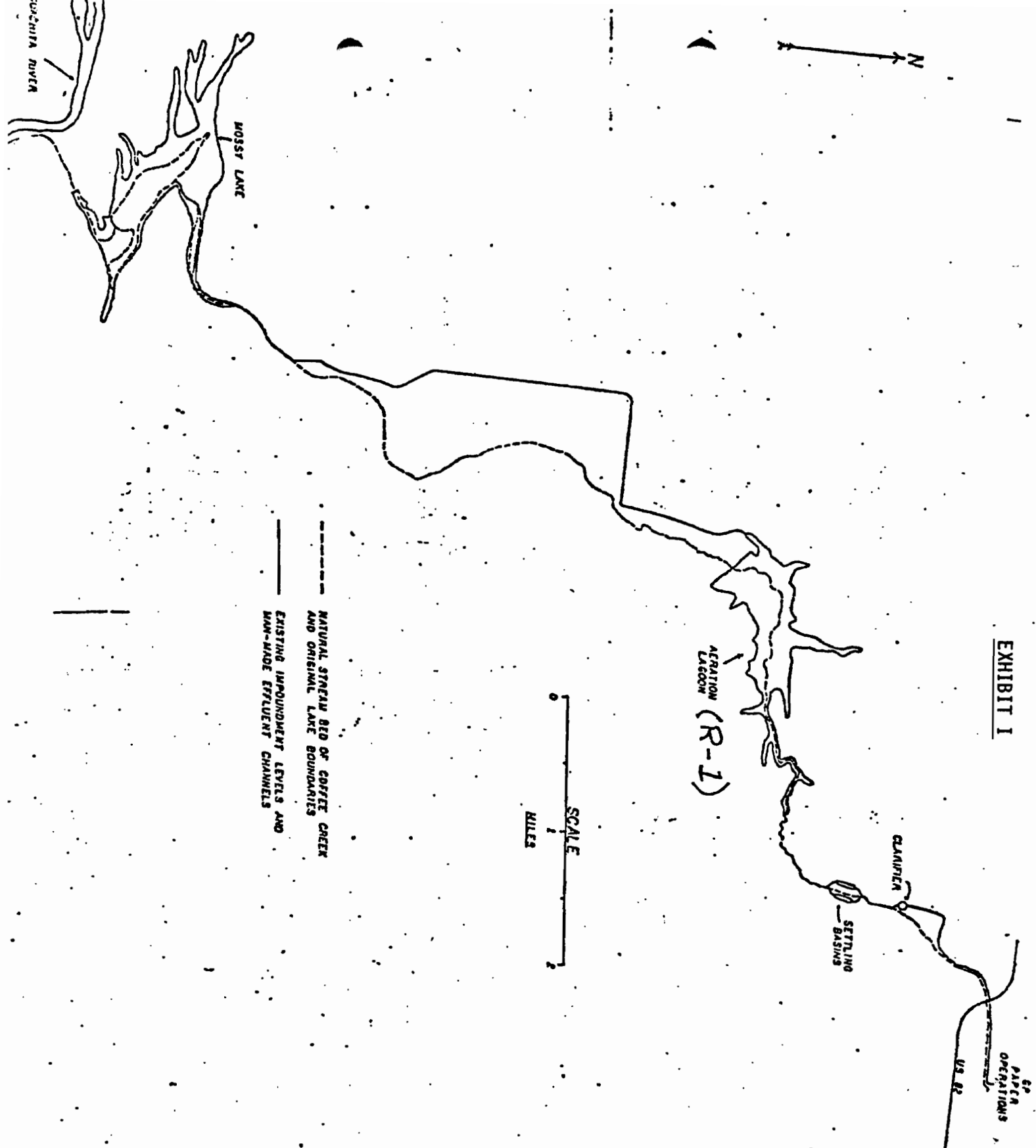
These gentlemen and the various citizens of Crossett and Ashley County they represent have been actively working with G-P for many months to help resolve the Coffee Creek issue.

Finally, we wish to comment that our review of Attachment IV of the Proposed Revisions to the Arkansas Water Quality Standards, Regulation No. 2, reveals a potential ambiguity between Subsection (c)(3)(A) and Subsection (c)(3)(C). The possible conflict between these provisions could be resolved by modifying (c)(3)(C) to read as follows:

"Existing instream uses are (i) those beneficial and demonstrable uses of a stream which are currently being attained which have been attained during the preceding five years, or (ii) those which are assumed under Subsection (c)(3)(A) above; and includes such uses as a raw water source for public, industrial, or agricultural water supplies; primary or secondary contact recreation; and protection and propagation of fish, shellfish and wildlife."

Mr. Chairman, I will be happy to answer any questions and Georgia-Pacific again thanks you for the opportunity to present this statement.

EXHIBIT I



NO.	DATE	BY	REVISION
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STATE OF GEORGIA
 COUNTY OF CAROLINE
 CITY OF
 PROJECT NO. 22112
 SHEET NO. 1

FLOW DATA
G-P TREATMENT SYSTEM
(Million Gallons Daily)

<u>Date</u>	<u>Discharge Point</u>	
	<u>R-1 Lagoon to Coffee Creek</u>	<u>Coffee Creek to Ouachita River</u>
August, 1979	47.4 MGD	48.0 MGD
September, 1979	47.9 MGD	48.5 MGD
October, 1979	46.5 MGD	45.6 MGD

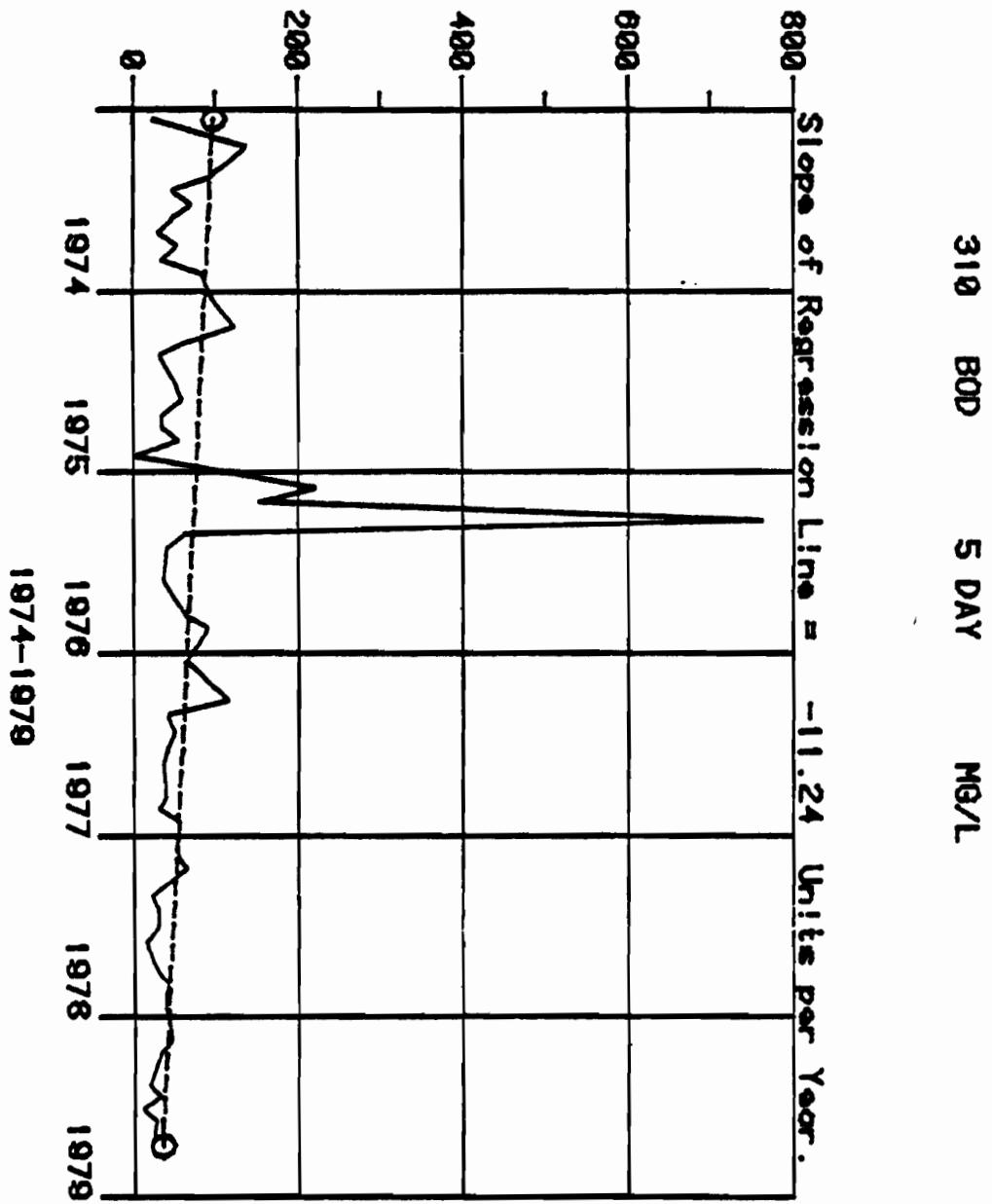
ANNUAL AVERAGE CONCENTRATIONS OF
BOD DISCHARGED FROM R-1 LAGOON

<u>Year</u>	<u>Annual Avg. BOD</u>
1975	76 p.p.m.
1976	70 p.p.m.
1977	47 p.p.m.
1978	32 p.p.m.
1979	26 p.p.m.*

* First 10 months average

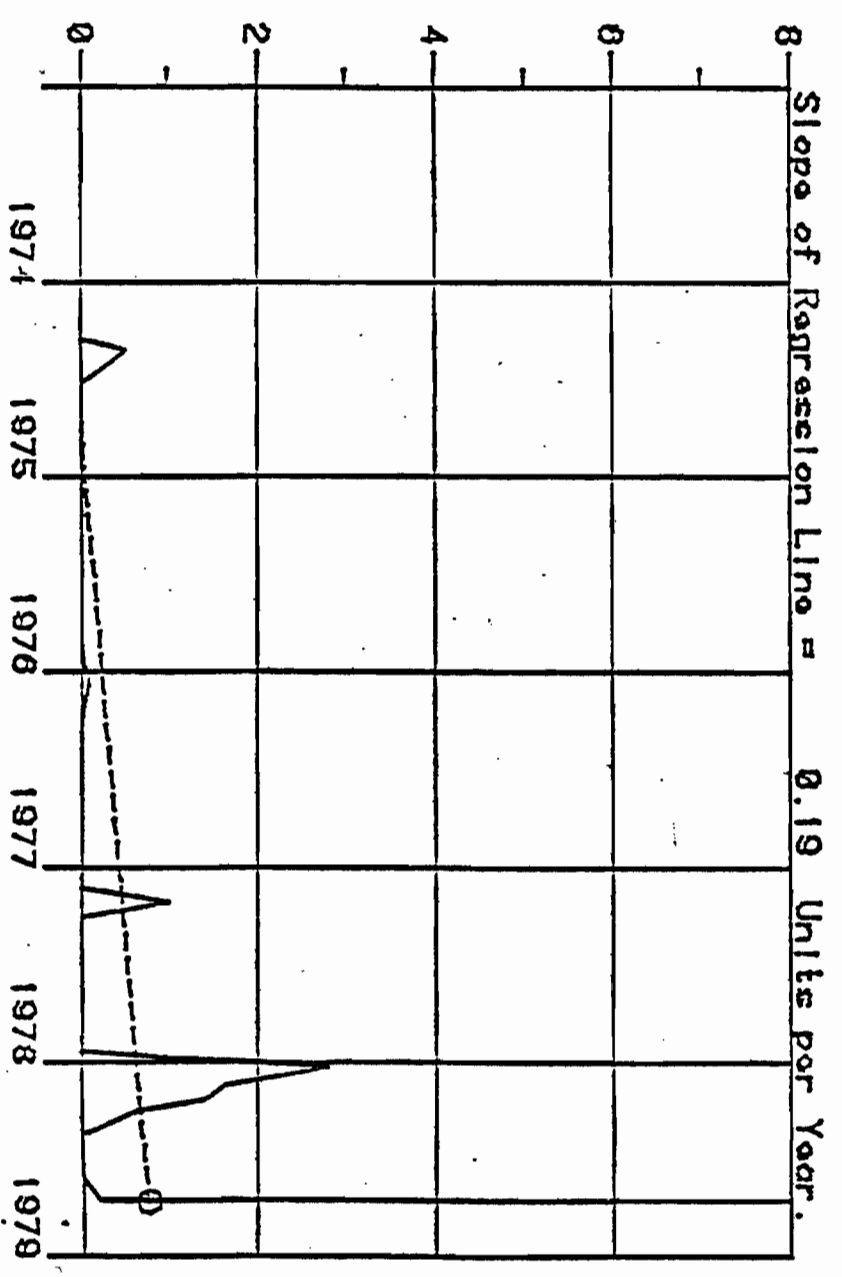
NOTE: Error on graph: "Slope of Regression Line."
ADPC&E is in agreement that one figure was
not plotted correctly.

1116APCC 050095 OUA11A 07364088 33 06 29.0 092 01 54.0
 COFFEE CREEK NR CROSSSETT ARK
 OUACHITA RIV. 310 BOD 5 DAY MG/L SW LOWER MISSISSIPPI



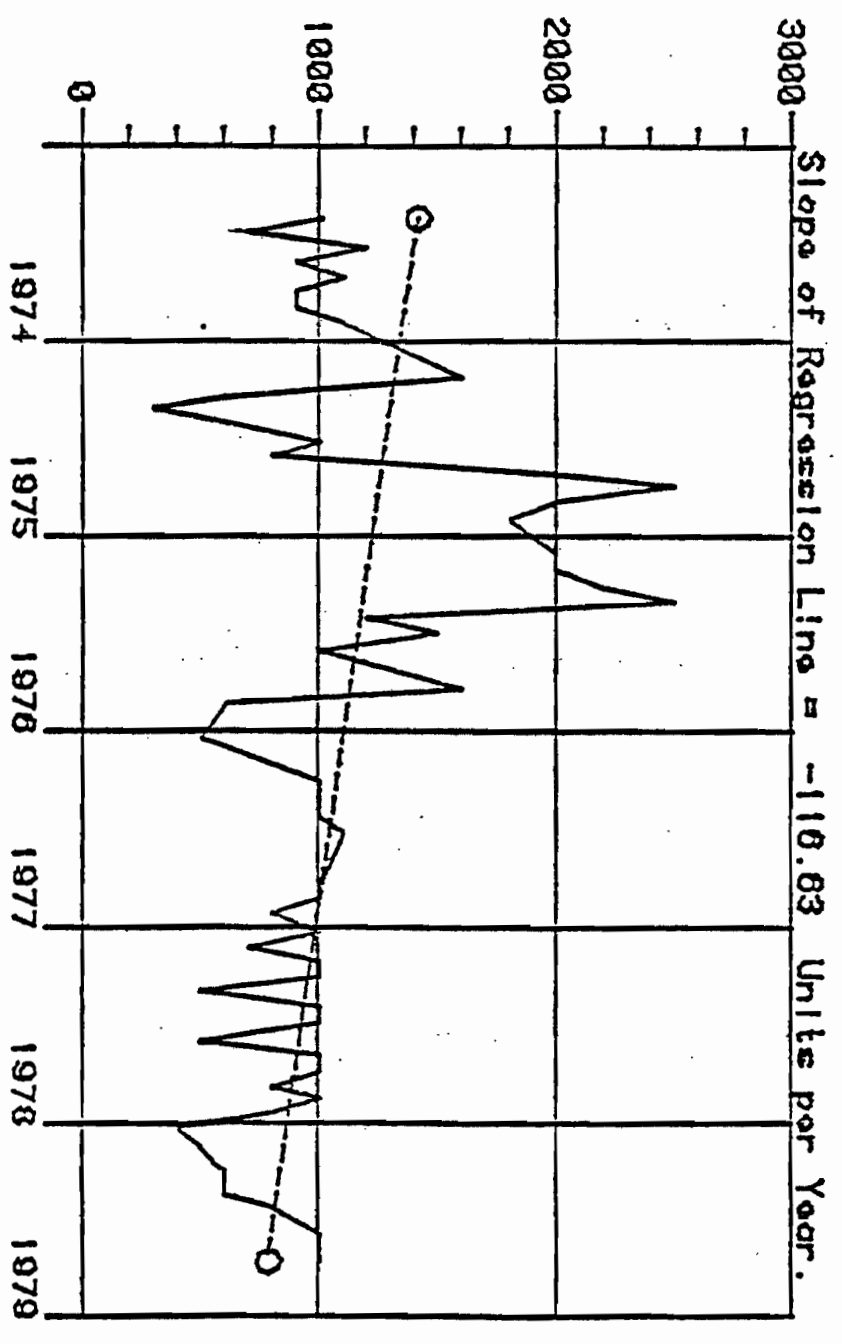
1116APCC 050095 QUAI1A 07364088 33 06 29.0 092 01 54.0
 COFFEE CREEK NR CROSSETT ARK 05003 ARKANSAS
 OUACHITA RIV. SW LOWER MISSISSIPPI

300 DO MG/L



1118APCC 050095 QUA11A 07364088 33 06 29.0 092 01 54.0
 COFFEE CREEK NR CROSSETT ARK
 OUACHITA RIV.

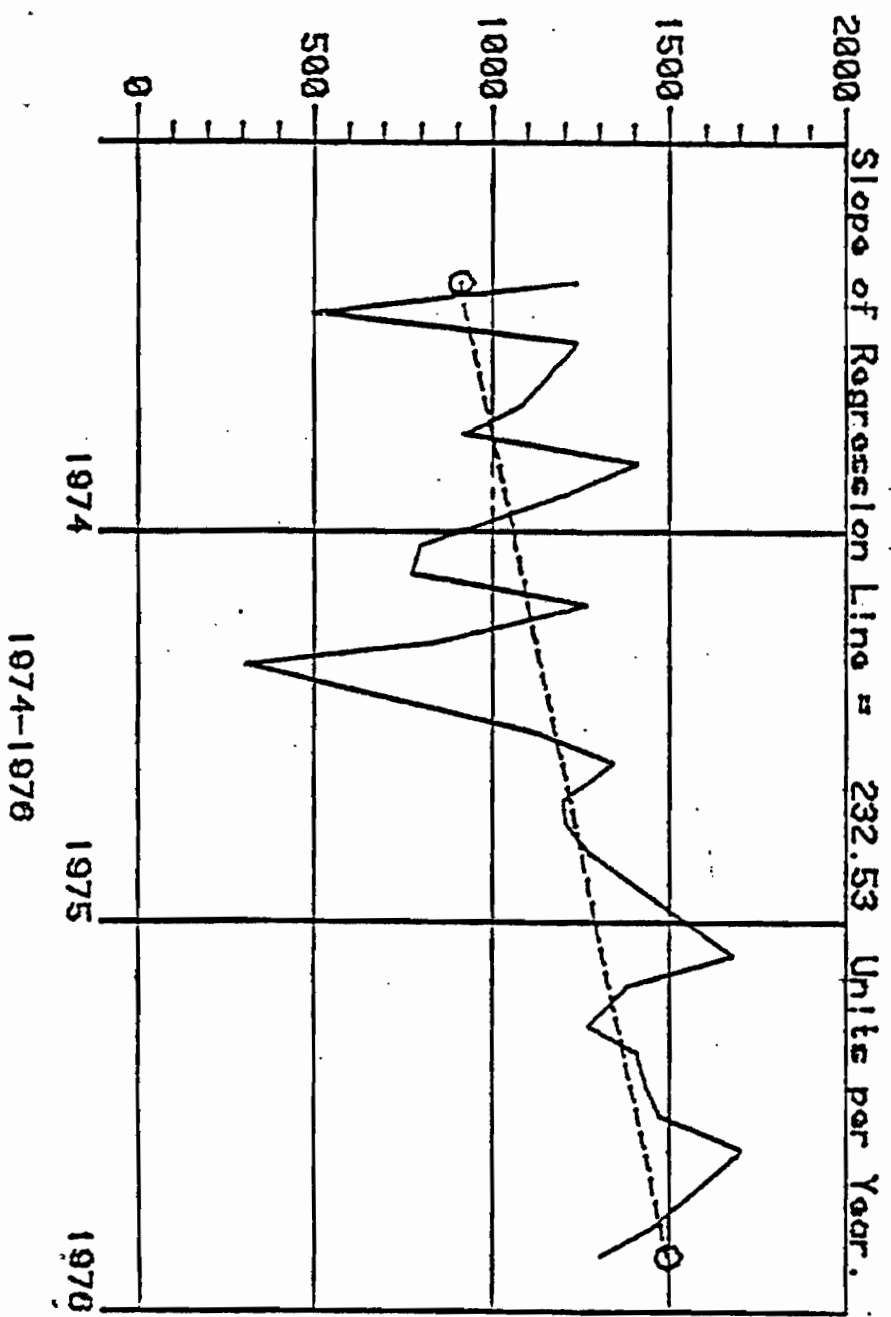
80 COLOR PT-CO UNITS



1974-1979

1116APCC 050095 QUAR 1A 07304088 33 06 29.0 092 01 54.0
COFFEE CREEK NR CROSSETT ARK
OUACHITA RIV. DISS-105 C MG/L 05003 ARKANSAS
SW LOWER MISSISSIPPI

515 RESIDUE



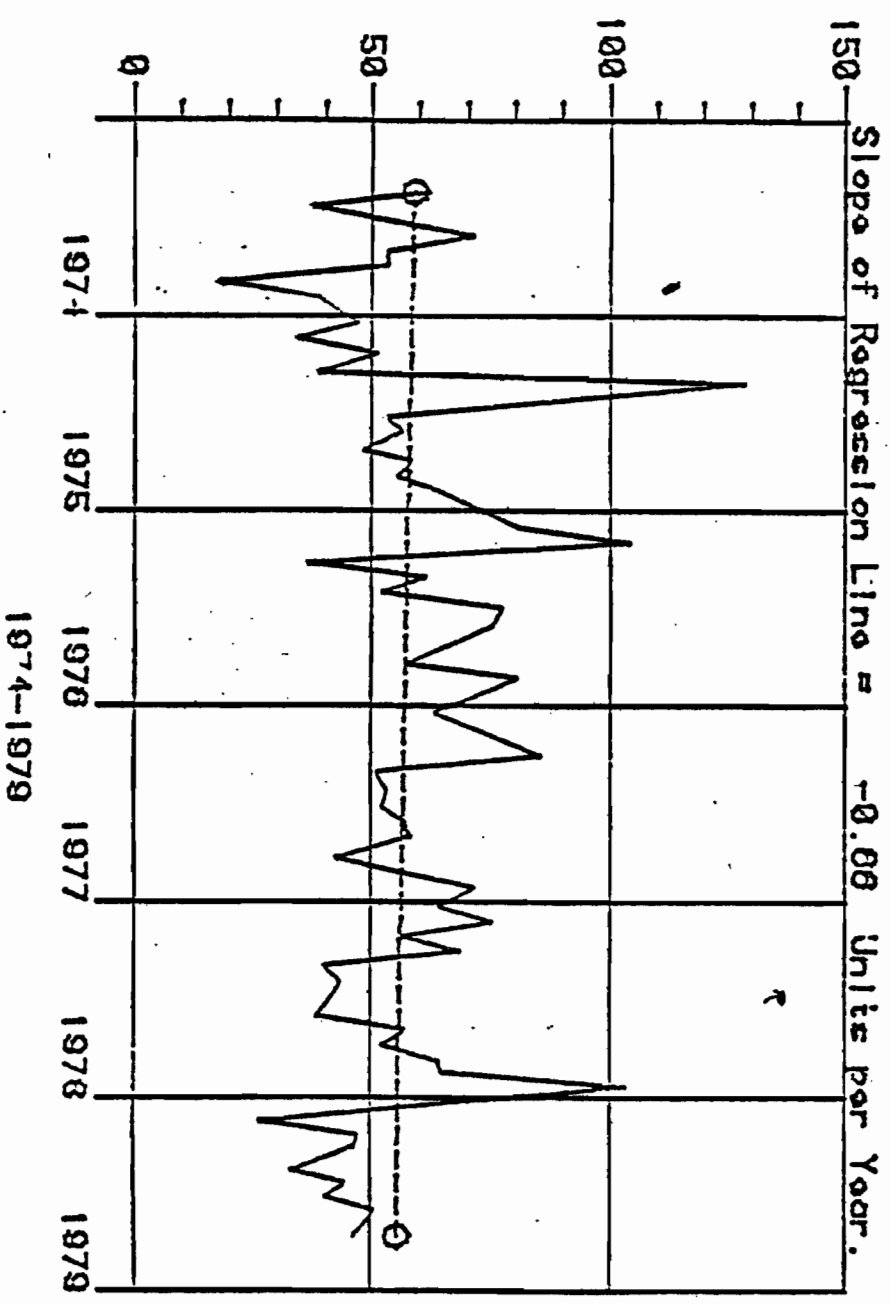
1116APCC 050095
 COFFEE CREEK NR
 OUACHITA RIV.

QUA11A

07304088

33 06 29.0 092 01 54.0
 05003 ARKANSAS
 SW LOWER MISSISSIPPI

530 RESIDUE TOT NFLT MG/L



1116APCC 050095
COFFEE CREEK NR
OUACHITA RIV.

OUA11A

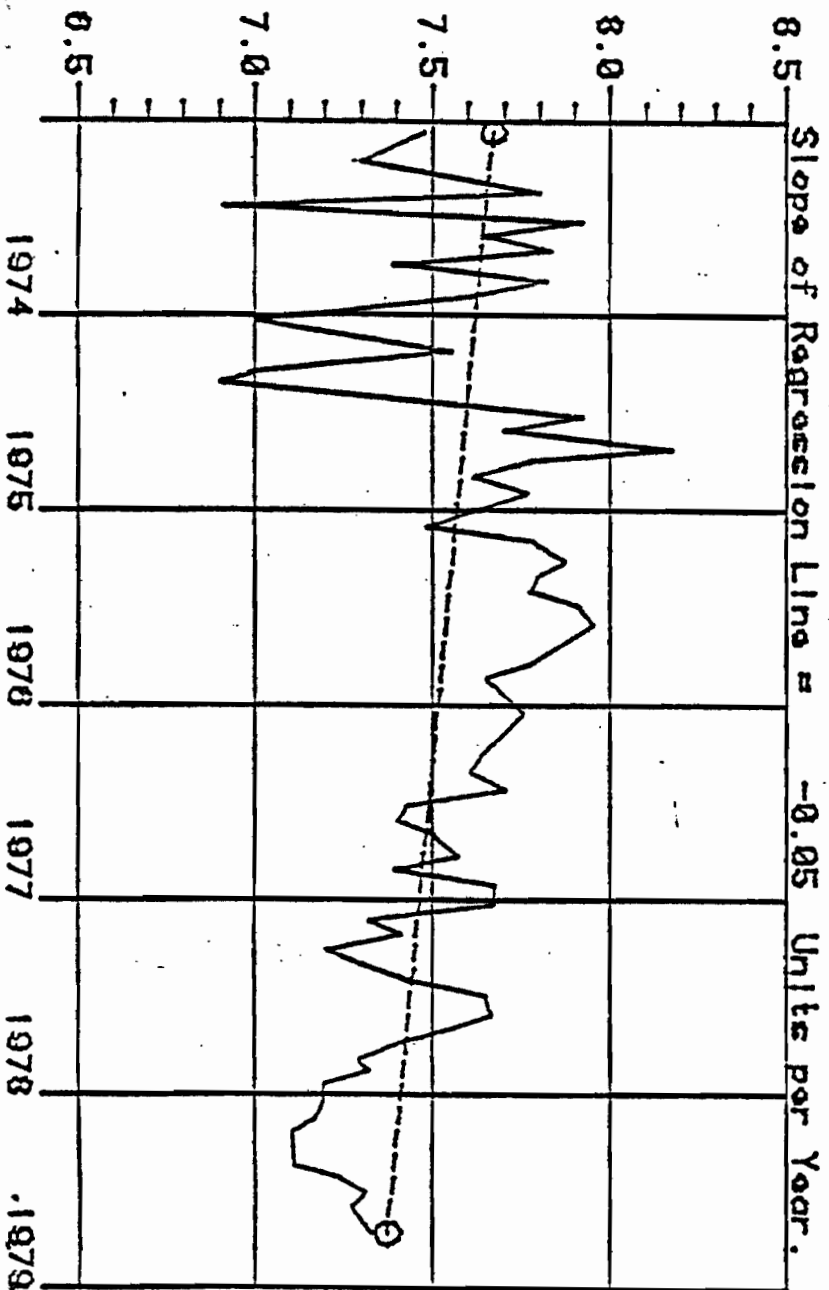
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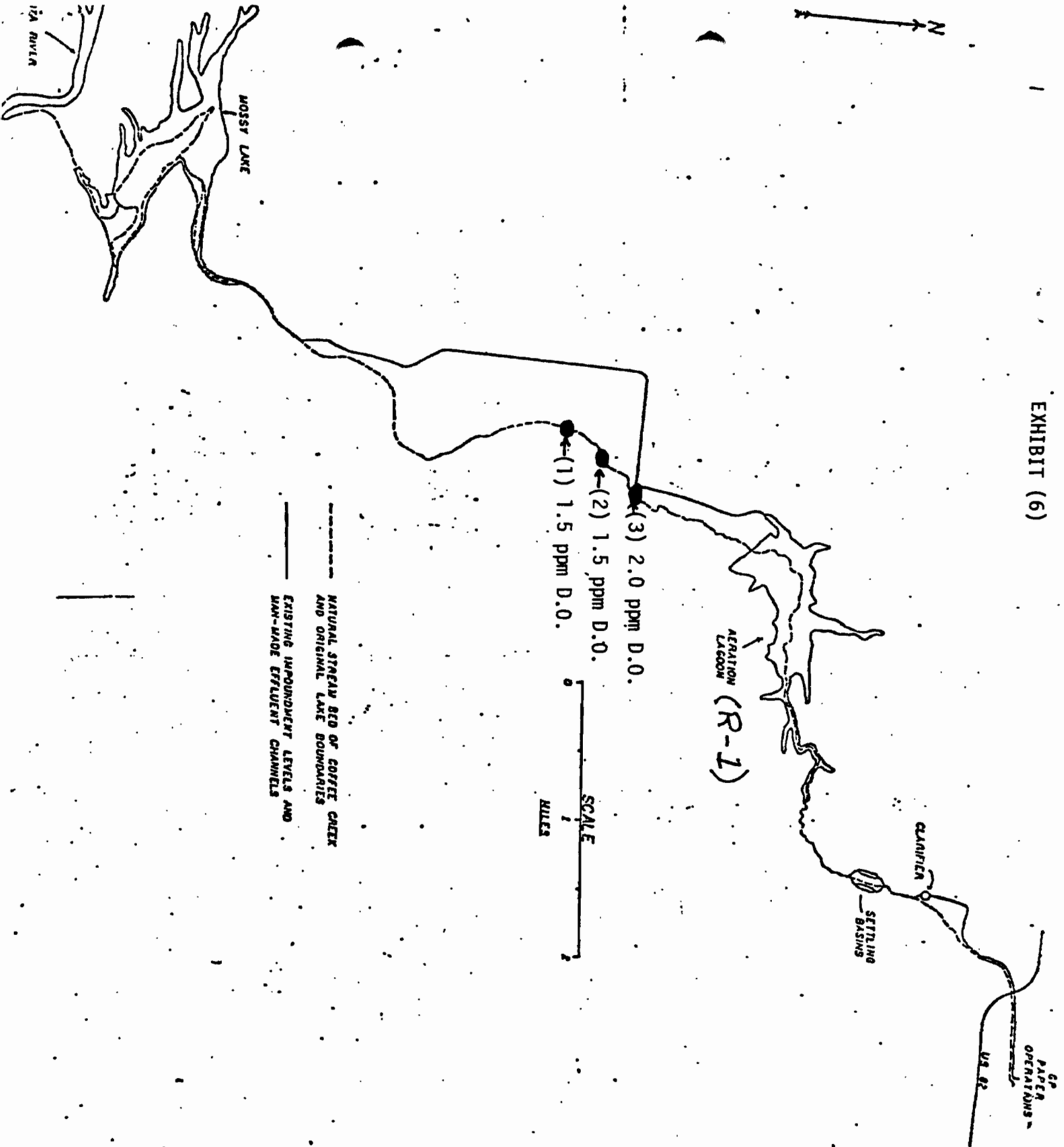
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74-1979

EXHIBIT (6)



REV	DATE	DESCRIPTION
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GEORGIA-P



DOYLE
CROSBETT
CORPORATION

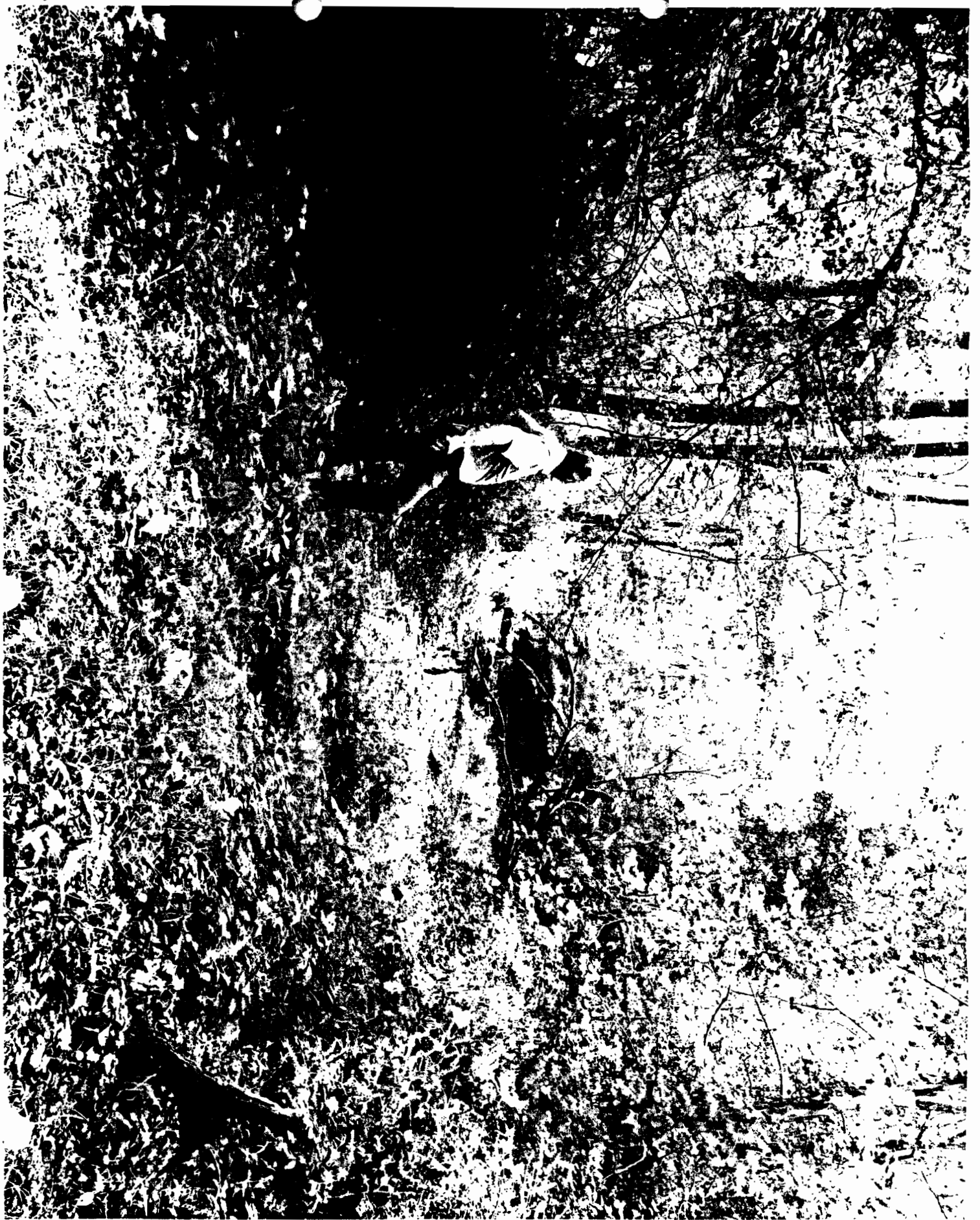
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Attachment 6

A STATEMENT ON WATER QUALITY MANAGEMENT PROGRAM
Before the
ARKANSAS COMMISSION ON POLLUTION CONTROL AND ECOLOGY
December 17, 1979
by the
UNION CARBIDE CORPORATION
as presented by
J. L. Powell

We have not had the time to review the entire State of Arkansas Water Quality Management Program in detail, so we are limiting our comments today to Chapter VI Water Quality Standards. We reserve the right to comment further on Chapter VI or on other portions of the Plan at a later date, if necessary.

(a) Toxic Substances, Section 5(k), Page 7, Chapter VI

The proposed revision states "The Commission will determine toxicity concentrations using literature values and/or bio-assay techniques for the most sensitive species of indigenous aquatic life".

This appears to indicate that major and significant changes may be made in the Arkansas Water Quality Standards without the advantage of a hearing and public comments prior to implementation. We question whether this fulfills the requirements of the Arkansas Administrative Procedures Act. The requirement of a hearing and public comment must be spelled out in the Water Quality Standards themselves.

(b) Guidelines - Appendix 2, Chapter VI

One often hears the statement made that guidelines are only guidelines. Unfortunately, guidelines are too often used to formulate regulations regardless of how reliable the original guidelines were formulated. For example our NPDES Permit was issued in 1974 and Arkansas guidelines were used to formulate the maximum permissible concentrations of various components. Using the Red Book to formulate in-stream guidelines may be satisfactory in some cases, but using these guideline concentrations in turn to determine the maximum permissible concentrations in effluents discharged to sewers and streams is not a satisfactory procedure in our view. It fails to take into account the nature of the discharge and/or the nature of the receiving water. We suggest that the effluent guidelines be deleted from the Water Quality Management Program and effluent standards be determined by the Department on a case by case basis after due consideration of all factors.

(c) Guideline Values for Maximum Permissible Heavy Metals to be Discharged to Sewer or Stream - Appendix 2, Chapter VI

The concentrations for the elements in this table are the same concentrations given for in-stream guidelines (with the exception of Mercury). It is noted in this table that when a ten-fold dilution is available in the receiving water, the values given may be increased tenfold but in fact many of the elements are not increased at all. This would mean that fish and other aquatic organisms must be able to live in the effluent discharge itself. This is much too restricted for municipal and industrial discharges. A safety factor of between 20 and 100 has already applied to the LC 50 values for the most sensitive species of indigenous aquatic life.

This appears to be an arbitrary and capricious decision and must be supported by logical rationale or the guidelines are of no real value.

The maximum discharge value for Cadmium for example is given as .012 mg/l. This value is much too low and we would recommend the value of .10 mg/l in this case. Further, we question the rationale of multiplying some of the concentrations by 10 to get the maximum limit and other values by only 1.

(d) In-stream Guidelines - Ammonia - Appendix 2, Chapter VI

For clarity, the limit for ammonia should be expressed as micrograms NH_3 (as N) per liter. Although the Quality Criteria for Water, 1976, or the Red Book is a bit ambiguous as to whether ammonia concentrations should be expressed as NH_3 or as N, the source data from Thurston, et al (1974) employed values as N.

The following EPA document also shows the same numbers all expressed as N rather than NH_3 . Ammonia Toxicity by Wm. T. Willingham, Control Technology Branch, Water Division, U. S. EPA Region VIII, February 1976. Refer to the abstract, the introduction and Table III on Page 9.

Further, the values given in Tables 2 and 3 on Pages 10 and 11 of the Red Book are actually mg N/l based on textbook equilibrium data.

(e) Guidelines for Maximum In-stream Concentrations - Appendix 2, Chapter VI

The in-stream guideline for ammonia of .02 mg N/l is no longer the accepted values for all waters based on research work completed since the publication of the Red Book. Based on this new work and the regulations issued in other states such as Colorado and Missouri, we suggest the following guideline values be used

based on the type of fishery of the receiving water.

<u>Un-ionized Ammonia (ug N/l)</u>	<u>Fishery</u>
20 *	Trout or cold water
100 *	Small Mouth Bass or warm water

* Temporary - may be adjusted based on new information.

Site specific data can often be higher than these values and should such data indicate that higher values are acceptable they will be permitted.

(f) Guidelines - Appendix 2, Chapter VI

Guidelines and concentrations for both in-stream and effluent discharge concentrations should be specified as soluble concentrations, since these are the values that actually effect the toxicity to aquatic biota as expressed in the Red Book.

Attachment 2

CITY OF DECATUR

DECATUR, ARKANSAS

December 14, 1979

Arkansas Commission of Pollution
Control and Ecology
800¹ National Drive
Little Rock, Arkansas 72209

Re: "Arkansas Department of Pollution
Control and Ecology, Proposed
Revisions, Arkansas Water Quality
Standards, Regulation No. 2" dated
November 15, 1979; subject of
public hearing at 1:00 p.m.,
December 17, 1979

Gentlemen:

We support Attachment IV to the referenced publication
with the following exceptions:

1. Regarding section (c) (1) (C). We believe an un-
acceptable health risk is involved in tasting
water from drainage ditches or intermittent stream
basins where at times the flow is comprised solely
of a treated wastewater effluent. Therefore, we
believe the word "taste" should be deleted.
2. Regarding section (c) (1) (D). We believe this to be
redundant and tending toward causing confusion rather
than aiding in solution of problems. Therefore, we
believe sub-section (D) should be deleted.
3. Regarding section (c) (3) (D). We believe this sub-
is redundant and should be deleted. *section*

We are appreciative of the effort that has gone into the preparation of the proposed revisions. At issue is a very complex problem of regulation.

Unnecessary restriction has potentially profound adverse economic impact ramifications for much of the state.

We urge deliberation and flexibility in arriving at desirable controls.

Sincerely,
CITY OF DECATUR


Dennis Massey
Mayor

DCM/1a



**CRAFTON, TULL
& ASSOCIATES, INC.**

P. O. DRAWER 549 ROGERS, ARKANSAS 72756 (501) 636-4838

Attachment 8

ENGINEERS

LEMUEL H. TULL, P.E.
BOB H. CRAFTON, P.E.
R. GENE REECE, P.E.
TOM HOPPER, P.E.
EVERETT BALK, P.E.

December 17, 1979

Arkansas Commission on Pollution
Control and Ecology
8001 National Drive
Little Rock, Arkansas 72209

Re: Proposed revisions to Regulation No. 2, Arkansas
Water Quality Standards; public hearing at 1:00
p.m. on December 17, 1979

Dear Mr. Brooks and Commission members:

The proposed revisions place first and foremost considerations which under some circumstances are largely aesthetic. An implied secondary significance is assigned to the protection of people from injury.

We concur that aesthetic considerations are important and desirable to the extent to which they can be afforded.

We totally support the effort to improve Regulation No. 2, Section 4(c). We are convinced that arriving at workable controls involves a certain amount of trial and error. Further refinement may be necessary and should be a part of the process of regulatory development.

At this time, we support the proposed Section 4(c) revisions with the following exceptions:

1. In (c) (1), we believe that "substances or materials" adequately defines the problem source and that the following words should be deleted: "including floating debris, oil, scum and other matter".
2. In (c) (1) (C), we believe the word "taste" should be deleted since it is unreasonable to expect that people would taste drainage water or water in an intermittent stream basin which is comprised solely or substantially of a treated wastewater effluent.
3. We believe (c) (1) (D) is an unnecessary complication, that such concern is adequately accommodated otherwise, and, therefore, should be deleted.

4. We believe that (c) (3) (D) will prove to be contradictory to (c) (2) and in practice, set a standard of its own, as well as result in substantial confusion placing an unnecessary burden on the Commission, on ADPCE staff, and on dischargers to these basins. Therefore, we believe (c) (3) (D) should be deleted.

We will be pleased to elaborate further should that become necessary.

Thank you.

Sincerely,



R.E. (Gene) Reece, P.E.
of CRAFTON, TULL & ASSOCIATES, INC.

RER:ba

STATEMENT TO
ARKANSAS COMMISSION ON POLLUTION CONTROL & ECOLOGY
PERTAINING TO THE PROPOSED REVISSIONS TO ARKANSAS
WATER QUALITY STANDARDS, REGULATION NUMBER 2-----
DECEMBER 17, 1979

MY NAME IS BOB BOGARD, I AM EXECUTIVE DIRECTOR OF THE
ARKANSAS FEDERATION OF WATER & AIR USERS, INCORPORATED, AN
INDUSTRIAL ENVIRONMENTAL ASSOCIATION. WE ARE GRATEFUL TO
YOU FOR THIS OPPORTUNITY TO COMMENT ON THE PROPOSED REVISIONS
ARKANSAS WATER QUALITY STANDARDS, REGULATION NUMBER 2. THE
FEDERATION OF WATER AND AIR USERS IS A PRIVATE, NON-PROFIT
MEMBERSHIP ORGANIZATION, DEDICATED TO EFFICIENT MANAGEMENT
OF OUR NATURAL RESOURCES AND PROTECTION OF OUR ENVIRONMENT.
OUR MEMBERSHIP IS COMPOSED PRIMARILY OF INDUSTRIES THAT HAVE
OPERATIONS IN ARKANSAS AND WHICH HOLD ONE OR MORE ENVIRON-
MENTAL PERMITS FROM THE DEPARTMENT OF POLLUTION CONTROL AND
ECOLOGY OR THE FEDERAL ENVIRONMNETAL PROTECTION AGENCY OR
BOTH. CURRENT MEMBERSHIP NUMBERS MORE THAN 140.

THE WATER QUALITY COMMITTEE OF THE FEDERATION HAS REVIEWED
THE PROPOSED REVISIONS TO THE WATER QUALITY STANDARDS, REGULATION

NUMBER 2. THE FEDERATION WHOLEHEARTLY SUPPORTS THE REVISIONS AND STRONGLY URGES THE COMMISSION TO ADOPT THEM.

WE BELIEVE THE REVISIONS OFFER A REALISTIC APPROACH AND WILL PRESERVE THE STATES' WATER QUALITY WHILE AT THE SAME TIME PROVIDING THE FLEXIBILITY NEEDED BY THE REGULATORY BODY TO ALLOW FOR CONTINUED ECONOMIC AND INDUSTRIAL GROWTH THAT IS COMPATIBLE WITH ENVIRONMENT PROTECTION. THE PROPOSED JUSTIFICATION FOR THE EXCEPTION TO COFFEE CREEK SPEAKS FOR ITSELF. THE EXCEPTION IS DULY JUSTIFIED AND LONG OVER DUE. THE INTERMITTENT STREAM POLICY IS SOMETHING THAT THE STATE HAS NEEDED FOR A LONG TIME.

THE FEDERATION OF WATER AND AIR USERS WISHES TO COMMEND THE STAFF OF THE DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, FOR FORGING AHEAD WITH THESE REVISIONS TO THE WATER QUALITY STANDARDS.

WE APPRECIATE THIS OPPORTUNITY TO COMMENT ON THE PROPOSED REVISIONS TO THE WATER QUALITY STANDARDS.

THANK YOU