2/12/92

UNITED STATES ENVIRONMENTAL PROTECTION

BEFORE THE ADMINISTRATOR

In the Matter of:	*	
	*	
CHAMPION INTERNATIONAL CORPORATION,	*	NPDES Docket No. NC0000272
	*	
	*	
Permittee	*	

1. NPDES Permits - where the permittee attempts to raise constitutional issues not included in the issues granted by the Regional Administrator and not addressed at the hearing but raised for the first time in its post-hearing briefs, such issues will not be addressed by the Court.

2. NPDES Permits, Narrative Water Quality Standards - where the states only water quality standard for a particular pollutant is articulated in a narrative fashion, the permit writer is obliged to translate such standard into a numerical limit on a case-by-case basis.

3. NPDES Permits, Narrative Water Quality Standards - where a state or federal permit writer translates a narrative water quality standard into a numerical limit, the requirements pertaining to rulemaking set forth in § 303 of the Act do not apply since a new or revised standard is not involved.

4. NPDES Permits, Requirements of 40 CFR § 125:3(f) - whether or not the permitting Agency complied with this regulation is a procedural one to be determined by an examination of the facts in the record. Here they demonstrate compliance.

5. NPDES Permits, Evidence - where the Agency has made a prima-facie case on any issue, the burden shifts to the one who raised it to prove his case pursuant to 40 CFR § 124.85(a)(3).

6. NPDES Permits, § 401 Certification - when a permit condition has been placed in a permit pursuant to § 401 of the Act, i.e., state certification, this Court has no jurisdiction to consider such condition.

7. NPDES Permits, Use of Models - in a case where permit compliance is measured some 37 miles below the point of discharge, it may be necessary to utilize a mathematical model to determine compliance.

8. NPDES Permits, Narrative Standards - in determining the validity of a numerical translation of a narrative water quality standard, one must evaluate such translation on a case-by-case

basis considering all of the factors relevant to the discharge including river flow, discharge volume and any other factors unique to the discharge source. Limits imposed upon other like sources in the state are not a governing factor.

9. NPDES Permits, Effluent Limits Absent a Relevant State Water Quality Standard - where a state or states have not promulgated a water quality standard as to a particular pollutant, the permit writer is bound to establish such a limit for such pollutant in accordance with technology based criteria.

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Before: Thomas B. Yost
Administrative Law Judge

INITIAL DECISION

This matter is before me on an initial appeal of the subject permit by the permittee, later joined by others.

HISTORICAL AND FACTUAL BACKGROUND

Since the Agency's Joint Initial Brief and Findings contains an accurate and succinct recitation of the background of this case, I will lift it verbatim therefrom to form a basis for what follows:

> 1. The Pigeon River originates in the mountains of western North Carolina in Haywood county and flows for approximately 70 miles, crossing into Tennessee just below the Carolina Power and Light Company powerhouse at approximately River Mile 25, and flowing through Cocke County, Tennessee, to its confluence with the French Broad River (Douglas Reservoir). From the Tennessee-North Carolina state line to Newport, Tennessee, the river flows for approximately 20 miles, and from Newport to its confluence with the French Broad River, it traverses another 6 miles. [Feb., 1968 Federal Water Pollution Control Admin. Report, at pp. 11-12, appearing as Exhibit U within Attachment 1 to Tennessee Department of Health and Environment's (hereinafter "TDHE" or "Tennessee") September 14, 1987 submission to EPA. (Administrative Record (A.R.) Item #513A).]
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> 2. Beginning in 1908, Champion International Corporation (then known as Champion Paper & Fibre Company) hereinafter "Champion") began operation of a bleached-kraft pulp and paper mill on the Pigeon River at Canton, North Carolina. Prior to the beginning of the mill's operation, the waters of the Pigeon River downstream of Canton were clear, supported abundant wildlife and aquatic life, and were used for recreation. [Affidavit of Mr. Charles C. Chambers [Affidavit of Mr. Charles Chambers (A.R. Item ##361A and 378).]
>
> 3. Numerous studies dating as far back as 1945 have shown the Pigeon River below Canton to be severely degraded, and its fish and aquatic life to be adversely affected, by the effluent from Champion's mill. [See generally Tennessee's September 14, 1987 submission to EPA, exhibits F, G, H, I, J, K, L, M, and U within Attachment 1 thereto (A.R. Item #313A); id., Attachment 4 thereto (A.R. Item #513D); Tennessee Hearing Exhibit 2 (McKinney prefiled testimony), Exhibits C, G, and L thereto.]

4. The degraded condition of the Pigeon River has also adversely affected its recreational use and potential. [Exhibits O and P within Attachment 1 to Tennessee's September 14, 1987 submission to EPA (A.R. Item #513A); Attachment 4A to Tennessee's September 14, 1987 submission to EPA (A.R. Item #513E); Tennessee Hearing Exhibit 2 (McKinney prefiled testimony), at pp. 14-16 and references therein.]

5. The Pigeon River is a relatively small stream. During the flow conditions, the Canton mill diverts virtually the entire flow of the River through the plant. See Champion International Corporation v. EPA, 648 F. Supp. 1390, 1391 (W.D. N.C. 1986). [See, e.g., Exhibit R, at p. 7, within Attachment 1 to Tennessee's September 14, 1987 submission to EPA (A.R. Item #513A.] The mill's current National Pollution Discharge Elimination System (hereinafter "NPDES") permit authorizes use of 48.5 million gallons per day with actual use currently averaging 44 million gallons per day. [Champion Hearing Exhibit 2 (Crane prefiled testimony), at p. 3.]

6. Color in water is generally measured by use of the platinum-cobalt (hereinafter "Pu-Co") method. [Exhibit Q, at p. 51, to Tennessee Hearing Exhibit 2 (McKinney prefiled testimony).] Color units are expressed either as "true" color or "apparent" color, with true color referring to the measurement of color after removal of the turbidity from the water, while apparent color includes measurement of color due to substances in solution as well as color due to suspended matter. [Id.; Hearing Transcript, at p. 151 (Paul Davis testimony).]

7. The Pigeon River is a clear mountain stream above Canton, with apparent color typically in the range of 10 to 20 Pu-Co units and true color typically in the range of 5 to 10 Pu-Co color units. [Tennessee Hearing Exhibit 1 (Paul Davis prefiled testimony), at pp. 6-7.]

8. EPA has calculated the long-term average color in the Pigeon River upstream of the Champion mill to be 13 true color units, based upon data points ranging from 4 to 155 color units. [Hearing Transcript, at pp. 64-65 (Marlar testimony); EPA Hearing Exhibit 1 (Marlar prefiled testimony), at p. 8.] EPA has also determined that area streams have a natural background level of approximately 10 color units. [EPA Hearing Exhibit 1 (Marlar prefiled testimony), at p. 13]

9. Various studies have calculated historical monthly or annual average color levels of Champion's effluent discharge from the Canton mill to range from

approximately 650 to 900 (apparent) Pu-Co color units. [See November 10, 1983 EPA Memorandum, at p. 3, appearing as Exhibit P within Attachment 1 to Tennessee's September 14, 1987 submission to EPA (A.R. Item # 513A) (Champion's "effluent quality of 700 [color] units is approximately the yearly average from 1980 to 1982."); March, 1984 North Carolina study, at Table 8, appearing as Exhibit Q within Attachment 1 to Tennessee's September 14, 1987 submission to EPA (A.R. Item #513A) (Champion's five-year (1978-83) average is 771 color units and the monthly averages for the same period range from 653 to 882 color units) and id., at Attachment I, Table IA at p. 2 (Champion's monthly averages for 1983 range from 896 to 1444 color units); January, 1985 TVA (hereinafter "TVA") study, at Table 1, appearing as Exhibit R within Attachment 1 to Tennessee's September 14, 1976 submission to EPA (A.R. Item #513A) (samples taken on May 10 and August 30, 1983, show discharges of 1,200 and 900 color units, respectively).]

10. The record also indicates historical levels of apparent color in the Pigeon River in Tennessee waters ranging from a low of 27 to a high of 246 Pu-Co color units. [See TVA data sheet, "Table 2," appearing as Exhibit S within Attachment 1 to Tennessee's September 14, 1987 submission to EPA (A.R. item #513A) (TVA data collected February-October 1977 at River Mile 21.4 reflects apparent color readings from a low of 27 to a high of 80 Pu-Co units); October 25 1983 Tennessee Memorandum, appearing as Exhibit T within Attachment 1 to Tennessee's September 14, 1987 submission to EPA (A.R. Item #513A) (data collected September 26 - October 17, 1983 show apparent color levels in Tennessee waters between 88 and 246 units); January, 1985 Tennessee Valley Authority (TVA) report, at Table 1, appearing as Exhibit R within Attachment 1 to Tennessee's September 14, 1987 submission to EPA (A.R. Item #513A) (TVA data collected in August and September 1983 show apparent color levels in Tennessee waters from 55 to 140 color units); Hearing Transcript, at p. 150 (Paul Davis testimony) (samples collected at Newport on July 11, 1988 showed an apparent color reading of 238; samples collected at Newport on November 26 1988 showed an apparent color reading of 200).]

11. Following Champion's 1981 application for renewal of its NPDES permit for the Canton mill, which expired on June 30, 1981, the TDHE wrote the North Carolina Department of Natural Resources and Community Development (hereinafter "North Carolina"), asserting numerous violations of Tennessee water quality standards (hereinafter "WQS") caused by Champion's discharges.

[See January 6, 1983 letter, Elmo Lunn to Robert Helms (A.R. Item #6).] Thereafter, in February, 1983, North Carolina water quality officials met with Tennessee water quality officials and requested Tennessee to draft a "model" NPDES permit for Champion, including such terms, conditions, and effluent limitations as if the discharge was located in Tennessee. [Tennessee Hearing Exhibit 1 (Paul Davis prefiled testimony), at pp. 2-3; Hearing Transcript at p. 146 (paul Davis testimony); Tennessee Hearing Exhibit 2 (McKinney prefiled testimony), at p. 6; April 28, 1983 letter transmitting and attaching Tennessee's "model" permit to North Carolina (A.R. Item #9).]

12. Tennessee's Governor, Commissioner of TDHE, and Attorney General thereafter requested North Carolina officials to issue an NPDES permit to Champion that would be protective of Tennessee waters. [See May 24, 1983 letter from Commissioner Word to Secretary Grimsley (A.R. Item #11); May 27, 1983 letter from Governor Alexander to Governor Hunt (A.R. Item #10); June 7, 1983 letter from Attorney General Leech to Governor Hunt (A.R. Item #13).]

13. Tennessee's model permit (appearing as A.R. Item #9) specifically sought to address concerns regarding elevated levels of color in the Pigeon River, and recommended a color limitation in Part I.A. as follows:

> In-stream apparent color not be increased above background of more than 40 Pu-Co color units when measured outside a mixing zone extending from the discharge to River Mile 48.2 at Ferguson Bridge [i.e., below the Tennessee-North Carolina state line].

Part VII.D of the recommended permit further provided as follows:

> Color has been repeatedly demonstrated to be a pollutant of significance in the Pigeon River, (see 'Restoration of the Pigeon River, French Broad Basin, Program Commitment, 1982', Tennessee Division of Water Quality Control). To address this problem, a fixed limit and a mixing zone are established. In-stream apparent color is not to be increased by more than 40 Pu-Co color units outside a mixing zone extending to River Mile 48.2, Ferguson Bridge. This level was selected on the basis of observations of laboratory samples and normal ranges of color in area streams. The mixing zone includes major tributaries to the

Pigeon River and therefore allows for available dilution. (Emphasis in original.)

14. On July 6, 1983, TDHE Commissioner Word wrote EPA Regional Administrator Charles Jeter, complaining of North Carolina's delay in issuing the NPDES permit and requesting EPA's assistance as "an arbiter of interstate pollution problems." [A.R. Item #15.] Also in July, 1983, the Pigeon River Action Group (hereinafter "PRAG") requested that EPA exercise careful oversight of the renewal of the Champion permit. [A.R. Item #17.]

15. At a meeting of EPA, Tennessee, and North Carolina technical staff held on September 19, 1983, there was agreement that a color level of no more than 50 color units at the state line was necessary. [EPA Hearing Exhibit 1 (Marlar prefiled testimony), at p. 13; EPA Memorandum to File, dated September 19, 1983 (A.R. Item #28.] However, disagreement continued as to what permit limits were required to effectuate a 50 color unit state-line limit, with North Carolina concluding that color removal of up to 35% was required, Tennessee concluding that color removal of up to 80% was needed and EPA concluded that up to 89% removal was necessary. See Champion International Corporation. v. EPA, 648 F.Supp. 1390, 1392 n.2 (W.D. N.C. 1986).

16. On October 26, 1984, North Carolina gave public notice of its draft permit. See Champion International Corporation v. EPA, 648 F.Supp. 1390, 1392 (W.D. N.C. 1986). A public hearing was held before the North Carolina Environmental Management Commission on January 29, 1985, at which time Tennessee submitted a "Response" incorporating its objections to the draft permit. [A.R. Item #513-513H.]

17. Tennessee therein objected to the lack of absolute enforceable color requirements in the permit and to the fact that the general 75% removal target might not achieve a 50 color unit level at the state-line during low flow conditions when effluent levels were at higher levels.

18. On February 26, 1985, EPA commented upon the draft permit [A.R. Item #54], which was followed by further EPA comments on April 23, 1985. [A.R. Item #55.] Rather than responding to those comments and the objections of Tennessee and PRAG, North Carolina instead issued a "final" permit on May 14, 1985. [A.R. Item #57.] Since North Carolina had deprived EPA of the opportunity to object to the permit before issuance, as required by § 402(b)(5) of the Clean Water Act (hereinafter "the Act")

and 40 CFR 123.44(a),(b),(j), EPA deemed the May 14, 1985 permit to be a "proposed permit" subject to the requisite 90-day comment period and other objections set forth in 40 CFR 123.44. [See July 18, 1985 EPA letter (A.R. Item #68.]

19. On July 31, 1985, the state of Tennessee formally requested EPA to "take action to void the North Carolina-issued permit on substantive grounds and to itself issue a permit which will adequately protect the interstate waters of the Pigeon River from continued degradation." [A.R. Item #70.] Similarly, PRAG, by letter dated May 27, 1985, requested "that EPA exercise its powers under 33 U.S.C. § 1342(d) to object to the Champion permit on the grounds that it does not comply with the Act and NPDES regulations." [A.R. Item #59.]

20. Thereafter, on August 6, 1985, EPA formally objected to the permit pursuant to 40 CFR § 123.44(b)(2). [A.R. Item #71.] EPA objected to the permit limitations relating to color on the basis that compliance with § 301(b)(1)(C), 33 U.S.C. § 1311(b)(1)(C), was not adequately addressed insofar as the "color standards in the North Carolina and Tennessee segments of the Pigeon River may not be met unless the terms of the permit are changed." Neither North Carolina nor Champion requested a public hearing as provided for in 40 CFR § 123.44(e), and North Carolina failed to modify the permit in accordance with EPA's objections. Therefore, under 40 CFR § 123.44 and § 402(d)(4) of the Act, 33 U.S.C. § 1342(d)(4), exclusive authority to issue the Champion permit passed to EPA on November 4, 1985 and, by letter dated November 13, 1985, EPA advised Champion that it had "assumed responsibility for re-issuance of the NPDES permit for the Champion International Corporation Mill at Canton, North Carolina." [A.R. Item #79.]

21. On January 17, 1986, Champion filed an action against EPA in the United States District Court for the Western District of North Carolina, seeking to overturn EPA's assumption of permitting authority for the Canton mill. [A.R. Item #905.] Tennessee, North Carolina, and PRAG were thereafter allowed to intervene in the action and EPA's assumption of permitting authority was ultimately upheld in that litigation. See Champion International Corporation v. EPA, 648 F.Supp. 1390 (W.D. N.C. 1986), subsequent opinion 652 F.Supp. 1398 (1987), aff'd in part, vacated in part, and remanded, Champion International Corporation v. EPA, 850 F.2d 182 (4th Cir. 1988).

22. On September 25, 1989, following several public hearings in North Carolina and Tennessee, and the issuance of several prior draft permits, the EPA issued its final NPDES Permit No. NC0000272 to Champion International Corporation for the Canton mill. [A.R. Item #511.] Thereafter, both Champion and the Dead Pigeon River Council (hereinafter "DPRC") filed objections to the permit and requested the Regional Administrator for EPA Region IV to grant an evidentiary hearing. In his Orders dated December 6, 1989, the Regional Administrator partially granted and partially denied those requests. Both the state of North Carolina and Tennessee thereafter applied for and were granted party status in these proceedings. An evidentiary hearing was held before the Administrator Law Judge in Atlanta, Georgia, on April 15-16, 1991.

I have added the following factual statements:

Since the Tennessee state line is approximately 37 miles below the point of discharge, includes other color sources and passes through a large reservoir prior to reaching that border and since the mill must know how to operate its facility in a manner which will meet the permit limits, the permit uses a mathematical model to predict what effluent color level will achieve the permit's requirements.

The permit also allows for changes in the input parameters to the model as the operating improvements to the mill are installed. The mill has committed itself to a multi-million dollar program of internal production modernization changes which all parties feel will substantially improve the quality of its effluent.

DISCUSSION OF THE ISSUES

The Regional Administrator's Order of December 6, 1990 identified the issues granted to be:

The following issues are presented for hearing by the DPRC:

1. Whether the effluent limits in the permit assure compliance with the Tennessee WQS for color. Specifically, whether the use of an average monthly flow in the color calculation provides an accurate prediction of the color in the river at the state line.

2. Whether the compliance schedule for meeting the color limitation should be shortened and should contain more definite interim requirements.

3. Whether Champion has satisfied the requirements of 40 CFR § 125.3(f) to properly allow the use of the in-stream oxygen addition as a means of compliance with the biochemical oxygen demand (hereinafter "BOD") and dissolved oxygen (hereinafter "DO") provisions.

4. Whether EPA improperly failed to include a water-quality based effluent limit for total suspended solids (hereinafter "TSS").

The following issues are presented for hearing by Champion:

1. Whether the permit provisions for Chlorine and Effluent Suspended Solids Minimization impose an unreasonable timetable and efforts duplicative of previously reported studies for development, submittal, review, approval and implementation of chlorine and effluent suspended solids minimization programs.

2. Whether the color limitation is an unlawful and unreasonable interpretation of Tennessee's narrative WQS, in light of previous and subsequent state interpretations of this narrative standard.

3. Whether EPA Method 8290 for measurement of dioxin is a legal, scientifically valid and appropriate method for determining dioxin concentrations for regulatory purposes at the levels targeted in the permit.

4. Whether the color limitation unlawfully imposes a Tennessee WQS never adopted, submitted, or approved pursuant to the requirements of § 303 of the Act.

5. Whether the color limitation unlawfully imposes requirements more stringent than required by the North Carolina WQS.

The other parties did not raise any issues of their own.

CHAMPION ISSUE #2

I am of the opinion that this issues is not properly before the Court since the color limitation was placed in the permit pursuant to § 401 of the Act. 40 CFR § 124.55 provides that any limitation or standard placed in an EPA issued permit at the request of a certifying state (§ 401) may not be challenged in an NPDES appeal process such as this one, but must be challenged or otherwise litigated in a state court or forum. The statute doesn't specify the precise form that a § 401 certification is to take and, in my experience, they can appear in many guises. In this case, given the complex history of this permit supra, it is not surprising that a piece of paper entitled "State of Tennessee's § 401 Certification" does not exist. However, ample evidence that such an event occurred is available at several places in this record. For example, in a letter dated April 27, 1989 (A.R. #471) the Tennessee Commissioner wrote to EPA commenting on the draft permit and expressed no dissatisfaction with the permit's color limitation. Again on August 15, 1989 (A.R. item #497) the Tennessee Commissioner provided comments to EPA and did not object to the color limits. Additionally, at the hearing, the Commissioner's designee, Mr. Paul E. Davis testified that as the person charged with the responsibility to determine the permit's adequacy to protect Tennessee's water quality standards (WQS), he

determined that the color limit was adequate to protect them (transcript pp. 161, 174, 180-182). This evidence is sufficient for me to find that such a certification was made and, therefore, Champion's Issue #2 is dismissed as being beyond the jurisdiction of this Court to decide.

However, since EPA does not support this thesis and to provide a reviewing authority with additional reasoning on this issue, I can also dispose of this matter on substantive grounds.

It should be noted that the permittee produced no testimony on this issue, and in its post-hearing briefs, attempted to raise this issue to a constitutional level. These arguments must be rejected out of hand for two reasons: (1) I have no authority to rule on constitutional issues, and (2) the permittee did not raise these issues in its request for a hearing and did not raise them at the hearing and is, thus, precluded from raising them for the first time at the appeal level. No evidence on this matter was presented by any party at the hearing. For these reasons, I will not address the constitutional issues attempted to be interjected at this late date.

The remaining objections to the permit color limitation are not well articulated since the permittee presented no direct evidence on the issue. Its concern seems to be that the choice of the 50 color units below the Tennessee state line is unnecessarily stringent and not consistent with the limits set for two other pulp mills in Tennessee. Obviously when one is dealing with a narrative standard such as presented here, one must operate on a case-by-case

basis. The other two mills in question discharge into large rivers and the volume of such discharge represents only a fraction of the river flow. In the instant case, Champion's discharge on many occasions, particularly at low flow conditions, constitutes almost the entire flow of the river. Obviously, such a condition requires a different approach than that required at the other two mills mentioned.

Additionally, the number was not picked out of a hat or chosen at random. The testimony of EPA's witness Marlar, who was responsible for drafting the permit, clearly demonstrated that he and his staff worked in close association with the relevant Tennessee officials and was satisfied that their analysis was well-grounded and persuasive. The Agency also performed independent evaluations, literature searches and reference to EPA water quality documents before concluding that the Tennessee choice was the correct one. Finally, complying with the permit standard for color will not cause any economic hardship on Champion since it has stated that its ongoing mill modernization program will result in compliance with the permit standard. (Champion Exhibit #2 and counsel statement on pp. 29-30 of the record.)

Champion also argues that the color limit in its permit is not a "Delta Number" unlike those in the other two mill's permits. A delta standard is one based upon the discharge source's contribution of additional color to the stream. Champion, thus, concludes that the color standard in their permit is more stringent. This is not correct. The 50 cobalt color standard in

its permit is expressed in true color units and not apparent color. In calculating a true color reading in a water body, one deletes background color values such as turbidity and it is, therefore, much like a delta standard, only expressed in a different way. In both cases, compliance is measured by attempting to measure only the permittee's contribution to river color and excluding the contributions of other manmade sources or naturally occurring contributions.

I am, therefore, of the opinion that the objections raised by the Permittee associated with Issue #2 supra, must be rejected as having no support in this record.

CHAMPION ISSUE #4

This issue is apparently based upon a misconception of what the Act requires. 33 U.S.C. 1313(c)(303c) cited by the permittee, requires that any new or revised WQS adopted by a state must be accomplished by whatever rulemaking procedures the state law requires such as notification, hearings, comments and publication. These new or revised standards are then reviewable by EPA to determine their consistency with the Act and the state's own river classification determinations.

The only way one could conceivably argue that 303(c) of the Act is relevant here is to assume that the 50-unit color standard appearing in the permit is a new or revised standard. It is clearly neither.

It is simply a situation where Tennessee and EPA have assigned a numerical limit to an existing and EPA approved narrative WQS, a

process that is well established in Agency policy and approved by many courts.

As a historical footnote, in 1974 EPA had promulgated a national technology-based color effluent limitation for certain segments of the pulp and paper industry, having initially concluded that color was a pollutant of national concern. Later, in 1982, EPA withdrew the limit concluding that color was not a problem of uniform national concern and that the industry should be regulated on a case-by-case basis to be dictated by water quality considerations. 47 Fed. Reg. 52006, 52014 (Nov. 1982). This case-by-case approach to permit writing was approved by the 4th Circuit in the case of Kennecott v. EPA, 780 F.2d 445, 457 (1985).

As noted above, the Tennessee portion of the Pigeon River is classified for the uses of industrial water supply, fish and aquatic life, recreation, irrigation and livestock watering and wildlife. Not surprisingly, the strictest standard for color is the one that relates to recreation, as follows:

> "There shall be no turbidity or color in such amounts or character that will result in any objectional appearance to the water."

Obviously, to simply put this language in a permit would be useless since neither the permittee nor the enforcing authority would ever know when a violation had occurred. Common sense would dictate that such a narrative standard must be translated into an enforceable and objective effluent limit or numerical in-stream color limit. An exact corollary exists in the Clean Air Act

wherein ambient air quality standards must be and are translated into specific source stack emission limits. This entire notion was endorsed by the Supreme Court in the case of EPA v. State Water Resources Control Board, 426 U.S. 200(1976). An even more specific ruling appears in the case of Champion International Corporation v. EPA, 648 F.Supp 1390, 1897 (W.D. N.C. 1986) involving this very permit. In that case, the Court noted that:

> "Obviously, the only way a permittee (in this case, Champion) can adequately comply with the color standard is for the permit to contain explicit and unequivocal direction as to how the company can comply. A numerical requirement accomplishes this result, informing the permittee of exactly what must be done to meet the narrative color standard. In addition, it allows the regulating authority to readily determine if the permittee is complying with the color standard."

To require that formal rulemaking be done in every permit writing procedure that EPA or a state does would bring the whole process to a grinding halt and result in a national disaster. The Tennessee law likewise recognizes this process by providing for the inclusion in state permits of "individually calculated effluent limitations." See Tennessee Rule 1200-4-5-.04.

Accordingly, I am of the opinion that Champion's Issue #4 supra, must be and is hereby **REJECTED**.

DPRC ISSUE #1

There is virtually no testimony or exhibits in this record to support DPRC's notion that the use of a 30-day average, as set forth in the permit, will not adequately protect Tennessee's WQS for color.

In his cross-examination of Mr. Marlar, DPRC counsel elicited from him agreement with the notion that if a color reading of 100 was measured at the downriver sampling site in Tennessee, it would not indicate that a violation of the permit was demonstrated. (P. 57 translation.) Mr. Marlar did not state that a reading of 100 color units would be likely or possible.

In his direct testimony (EPA #1, at pp. 4-8) Mr. Marlar discusses, at some length, the Agency's rationale for using a model as a compliance tool and also for using a 30-day average. No testimony was presented by other witnesses to refute Mr. Marlar's conclusions which I find to be valid and persuasive. Additionally, as pointed out in the post-hearing briefs of EPA and Tennessee, the court's have approved enforcement schemes which allow occasional excursions above permit limits, so long as they substantially protect a state's WQS. In this case, the state of Tennessee, acting through its duly constituted commission has ruled that the permit will protect its color standard. Courts have historically been loath to second-guess the expertise residing in such bodies. National Council on Compensation Insurance v. Gaddis, 786 S.W. 2d 240 (Tennessee, April 1989); Jackson Express, Inc. v. Tennessee Public Service Commission, 679 S.W. 2d 776 (Tennessee 1984); E.D.F. v. Tennessee Water Quality Control Board, 660 S.W. 2d 776 (Tennessee 1983). In the last case, the Court stated that even though some measurements might exceed the standard by a significant margin, it was not at liberty to substitute its judgement for that of the Board (at 782).

Accordingly, I am of the opinion that DPRC's Issue #4 must be rejected as having no substantial support in this record. Actually, it has almost none.

This disposes of the color issues.

OTHER ISSUES

DPRC's issue #2 has been resolved by the parties by inserting in the permit an agreed-upon schedule of compliance. There remained, however, a question as to when the clock started ticking on the execution of the schedule. This is true since the referred to schedule speaks in terms of

> "effective date + 6 months;
> effective date + 1 year, etc."

In its March 14, 1991 Order, the Court stated that the schedule submitted in his prehearing testimony by Theodore P. Crane, Jr., would be inserted into the permit and dismissed this issue. However, there remained the issue of when the effective date begins. Counsel were directed to brief this question.

Happily this matter is controlled by regulation. 40 CFR § 124.60(d) provides that:

> If at any time after a hearing is granted and after the Regional Administrator's notice under paragraph (c)(1) of this section it becomes clear that a permit requirement is no longer contested, any party may request the Presiding Officer to issue an order identifying the requirements as uncontested. The requirement identified in the order shall become enforceable 30 days after the issuance of the order.

Since my Order (supra) was issued on March 14, 1991, the effective begins 30 days thereafter.

DPRC ISSUE #3

The regulation cited reads as follows:

> (f) Technology-based treatment requirements cannot be satisfied through the use of "non-treatment" techniques such as flow augmentation and in-stream mechanical aerators. However, these techniques may be considered as a method of achieving WQS on a case-by-case basis when:
>
> (1) The technology-based treatment requirements applicable to the discharge are not sufficient to achieve the standards;
>
> (2) The discharger agrees to waive any opportunity to request a variance under § 301 (c), (g) or (h) of the Act; and
>
> (3) The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods.

The issue, as phrased by its author, is essentially a procedural one, i.e., did EPA follow the provisions of the regulation? Despite this the DPRC introduced evidence which attempted to show that the in-stream oxygenation system employed by Champion may have a deleterious effect on the flora and fauna in the river. This evidence will not be considered, since it is outside of the issue raised. Even if considered, it does not in my judgement, support the thesis proffered since it was essentially speculative in nature and unsupported by any scientific studies or data specific to this river.

As I read the regulation, in order for EPA to allow the use of in-stream aerators or in this case the introduction of oxygen to

the stream by mechanical means, all of the three requirements set forth therein must be met.

DPRC presented no testimony on requirements (1) and (2) but argued that since Champion did not examine "recycle and reuse or changes in operating methods," and EPA did not evaluate these alternatives, the requirements of the regulation were not met.

EPA and Champion argue that the regulation requires that alternatives "such as" those listed be examined and given that fact it is not mandatory that every option on the list be evaluated. I agree. The regulatory language employed is used simply to provide guidance to the permit writer as to the types of options that should be examined. Further bolstering this conclusion is the concluding phrase of the regulation stating "and other available methods." To accept the strict reading proffered by DPRC would render this phrase meaningless, since no one could ever be sure that every available method was studied. Since there are pulp mills all over the world, I doubt that any one knows precisely what methods are used by all of them. Accordingly, I am of the opinion that this argument has no merit and must be **REJECTED**.

As to (1) the Agency concluded that no proven technology exists that will allow the mill to meet North Carolina's biological oxygen demand (BOD) WQS. See the testimony of John Marlar and his handwritten notes (EPA exhibit #3). Additionally, the DPRC offered no testimony on this issue and could not suggest any technology that might work. I find that subsection (1) of the regulation has been met.

No one discussed (2) but the notes prepared by Mr. Marlar, supra, does state that the mill had agreed to waive any possible variance under the portions of the Act mentioned. Mr. Marlar opined that § § 301(c) and (h) do not apply to this discharger and that § 301(g) relates only to nonconventional pollutants. I agree as to subsections (c) and (h), but (g) does refer to color. Since, other than Mr. Marlar's handwritten notes, no documentary memorialization of this agreement seems to exist, I will direct the Agency to modify the permit to include language which states, in essence, that the permittee agrees by the issuance of this permit not to seek any variance under § 301 of the Act as mentioned in the regulation., supra. That will dispose of (2).

As to (3) which is the meat of the regulation and the one to which all parties directed their attention, the record is clear that the mill evaluated, in depth, the following treatment alternatives: Aerobic lagoons, artificial wetlands, ultra-filtration, power-activated carbon (hereinafter "PACT"), and granular activated carbon (hereinafter "GAC"). The alternatives were evaluated for efficiency, reliability, space requirements, energy/resource requirements, environmental impacts and cost. These alternatives were presented in a report done for the mill by EA Engineering, Science and Technology, Inc. (EA) in 1987 and was entitled Evaluation of Advanced Wastewater Treatment Alternatives for the Canton Mill Wastewater Treatment Plant. [A.R. Item # 155].

The EPA, in concert with the North Carolina officials, after analyzing the report, concluded that the lagoons and wetlands were

not feasible due to lack of space. They each would require over 1,000 acres which simply doesn't exist at the site. As Mr. Marlar put it, "The only way you could get the land would be to cut off the top of a mountain." Ultrafiltration has never been demonstrated to be technically feasible for consistently treating secondary effluent for a pulp mill with a 25 to 50 million gallon/day discharge. PACT and GAC had the lowest costs but would result in creating more problems than they solve since their utilization would cause an increase in total dissolved solids, air emissions and land fill use. Although the least costly of the various options, they would involve a capital cost in excess of $80 million, while the capital cost of oxygenation is $ 2.1 million. Based upon this evaluation, EPA concluded that the requirements of 40 CFR § 125.3(f)(3) had been met and that the in-stream system would meet the state's WQS for BOD and dissolved oxygen (DO). I find no fault with the conclusion and consequently find that the requirements of the cited regulation have been met in their entirety.

DPRC also tried to interject the notion that since the installation of the system there have been DO violations detected. As the Agency pointed out, this is an enforcement issue and not a permit issuance one and is, therefore, beyond the scope of this hearing. I agree.

DPRC ISSUE #4

DPRC initially raised this issue based upon a misconception of fact. During the prehearing motion exercise, counsel for DPRC

continued to argue that the state of North Carolina has a WQS for total suspended solids (TSS), in the face of clear evidence to the contrary. This issue was the subject of at least two pre-trial orders issued by the Court. See Orders dated March 20, 1991 and April 8, 1991. In those two orders, the Court dismissed Issue #4. The first order was based primarily on the Court's own examination of North Carolina's WQS. Subsequent thereto, the DPRC re-argued its position that such a standard exists and in response thereto, North Carolina entered the fray providing the Court with an in-depth analysis of the state's regulations, concluding that the state has no such standard. Based upon this eminently reliable source, the Court re-affirmed its prior order dismissing Issue #4.

Lest the casual reader conclude that the absence of a state WQS for a particular kind of pollutant means no limits in the permit therefore, I hasten to say that such is not the case. In the absence of a state WQS the permit writer imposes a technology-based effluent limit for that parameter pursuant, in this case, to 40 CFR § 430.80 and 430.90. It should also be noted that Tennessee doesn't have a standard for TSS either. Mr. Marlar testified that Champion's reduction of TSS and BOD materials generally, is one of the best in the industry. He also testified that both North Carolina and Tennessee have certified that the limits for TSS in the permit adequately protect all relevant state WQS. Issue #4 was dismissed and is not currently before the Court.

CHAMPION ISSUE #5

This issue was struck by the Court in its Prehearing Order dated February 13, 1991 and need not be addressed further.

CHAMPION ISSUES # 1 AND 3

These issues were voluntarily withdrawn by Champion based upon a resolution thereof between the permittee and EPA. An order memorializing this event was issued by the Court on February 12, 1991. This order noted that none of the other parties voiced any objection to the withdrawal.

In making the above-noted decisions, I have considered the entire record, and to the extent that arguments not specifically addressed herein but raised by the parties exist in this record, they are hereby **REJECTED**.

CONCLUSION

All of the viable issues have been resolved by this opinion. My only concern involves my innate distrust of models. However, in this case, given the unique physical factors involved, no realistic alternative appears to exist. Additionally, the permit contains a re-opener clause which allows the Agency to change the model or consider alternative strategies should the mill not be able to consistently meet the color limits imposed. This is sensible since the major improvements to the mill will not be completed for some time and the real benefits to the river will not be manifest until then.

With the one exception noted above involving the waiver issue, I find the permit to be proper as written and in accord with all of the requirements of state and federal law. The permit shall issue.[1]

Dated: 2/12/92

Thomas B. Yost
Administrative Law Judge

[1] Unless an appeal of this decision is made to the Administrator in accordance with 40 CFR 124.91 or unless the Administrator elects, sua sponte, to review the same as therein provided, this decision shall become the final decision of the Agency.

CERTIFICATION OF SERVICE

I hereby certify that, in accordance with 40 CFR § 22.27(a), I have this date hand-delivered the Original of the foregoing INITIAL DECISION of Honorable Thomas B. Yost, Administrative Law Judge, to Ms. Julia P. Mooney, Regional Hearing Clerk, United States Environmental Protection Agency, Region IV, 345 Courtland Street, Atlanta, Georgia, and have referred said Regional Hearing Clerk to said Section which further provides that, after preparing and forwarding a copy of said INITIAL DECISION to all parties, she shall forward the original, along with the record of the proceeding to:

Hearing Clerk (A-110)
EPA Headquarters
Washington, D.C.

who shall forward a copy of said INITIAL DECISION to the Administrator.

Dated: FEB 12 1992

Jo Ann Brown
Secretary, Hon. Thomas B. Yost