7/31/92

FILED

JUL 31 1992

ENVIRONMENTAL PROTECTION AGENCY
REGION IX
HEARING CLERK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

In the Matter of	*	
	*	
LOUISIANA-PACIFIC CORPORATION	*	Docket Nc. NPDES-09-87-0005
and SIMPSON PAPER COMPANY,	*	
NPDES Permit Nos. CA0005894	*	
and CA0005282,	*	
	*	
Permittees	*	

1. NPDES - permit appeal - The § 301(m) permits involved in this matter should not be revoked but be continued as modified by this decision.

2. NPDES - permit terms - The permits shall contain an acute chronic toxicity test.

3. NPDES - permit terms - The chronic toxicity tests shall involve a suite of tests including Dinnel 1987, ASTM mussel/oyster, kelp and abalone protocols.

4. NPDES - permit terms - Given the Consent Decrees, executed pursuant to a parallel Federal District Court case, there is no reason to conduct further recreational studies.

5. NPDES - permit terms - The terms of the Consent Decrees are accepted and, as modified by this decision, incorporated into the subject permits.

Appearances:

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Christopher A. Sproul, Esquire
Office of Regional Counsel
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street, RC-2-4
San Francisco, California 94105

FOR SIMPSON PAPER COMPANY AND LOUISIANA-PACIFIC CORPORATION:

Gary J. Smith, Esquire
Beveridge & Diamond
One Sansome Street, Suite 3400
San Francisco, California 94104

FOR SIMPSON PAPER COMPANY AND LOUISIANA-PACIFIC CORPORATION:

Marc A. Zeppetello, Esquire
Law Offices of Karl R. Morthole
100 Broadway
Third Floor
San Francisco, California 94111

FOR SURFRIDER FOUNDATION:

Mark A. Massara, Esquire
Surfrider Foundation
1642 Great Highway
San Francisco, California 94122

FOR THE UNDERWATER SOCIETY OF AMERICA & THE HUMBOLDT SKINDIVERS:

Mart Cortright, Pro se
Underwater Society of America
212 Liscom Hill Road
Arcata, California 95521

FOR THE CALIFORNIA DEPARTMENT OF FISH AND GAME:

Ms. Ann Malcolm
The Resources Agency
California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, California 95814

FOR NANCY TAYLOR, THE UNDERWATER SOCIETY OF AMERICA AND THE CENTRAL CALIFORNIA COUNCIL OF DIVING CLUBS:

Ms. Nancy Taylor, Pro se
1047 N. Cresc[illegible]gts. Blvd.
West Hollywood, California 90046

Ms. Nancy Taylor
P.O. Box 690
Cedar Key, Florida 32625

Before: Thomas B. Yost
Administrative Law Judge

INITIAL DECISION

This matter is before me on request for an evidentiary hearing made by the above-noted entities and other organizations, concerning the above-captioned permits. These cases were consolidated by order of the Regional Administrator ("RA") dated September 22, 1987.

When I first got this case, I was confused as to why the EPA would be involved in the issuance of National Pollutant Discharge Elimination System ("NPDES") permits in the State of California which has had the authority to issue such permits for many years. Upon review of the file it appears that these two permits were issued by the RA of the EPA Region IX pursuant to the authority contained in § 301(m) of the Clean Water Act ("the Act"). This rather unique section was added to the Act apparently following a rather vigorous lobbying effort on the part of the two mills involved in this case, since it only applies to them and no other pulp mills in the United States.

Since the language of this section provides critical guidance to the Court in deciding this matter, it will be quoted, in its entirety, as follows:

> (m) Modification of effluent limitation requirements for point sources
>
> (1) The Administrator, with the concurrence of the State, may issue a permit under § 1342 of this title which modifies the requirements of subsections (b)(1)(A) and (b)(2)(E) of this section, and of § 1343 of this title, with respect to effluent limitations to the extent such limitations relate to biochemical oxygen demand and pH from discharges by an industrial discharger in such State into deep waters of the territorial seas, if the applicant demonstrates and the Administrator finds that--

(A) the facility for which modification is sought is covered at the time of the enactment of this subsection by NPDES permit number CA0005894 or CA0005282;

(B) the energy and environmental costs of meeting such requirements of subsections (b)(1)(A) and (b)(2)(E) of this section and § 1343 of this title exceed by an unreasonable amount the benefits to be obtained, including the objectives of this chapter;

(C) the applicant has established a system for monitoring the impact of such discharges on a representative sample of aquatic biota;

(D) such modified requirements will not result in any additional requirements on any other point or non-point source;

(E) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(F) the discharge is into waters where there is strong tidal movement and other hydrological and geological characteristics which are necessary to allow compliance with this subsection and § 1251(a)(2) of this title;

(G) the applicant accepts as a condition to the permit a contractual obligation to use funds in the amount required (but not less than $250,000 per year for ten years) for research and development of water pollution control technology, including but not limited to close cycle technology;

(H) the facts and circumstances present a unique situation which, if relief is granted, will not establish a precedent or the relaxation of the requirements of this chapter applicable to similarly situated discharges; and

(I) no owner or operator of a facility comparable to that of the applicant situated in the U.S. has demonstrated that it would be put at a competitive disadvantage to the applicant (or the parent company or any subsidiary thereof) as a result of the issuance of permit under this subsection.

(2) The effluent limitations established under a permit issued under paragraph (1) shall be sufficient to implement the applicable State water quality standards, to assure the protection of public water supplies and protection and

propagation of a balanced, indigenous population of shellfish, fish, fauna, wildlife, and other aquatic organisms, and to allow recreational activities in and on the water. In setting such limitations, the Administrator shall take into account any seasonal variations and the need for an adequate margin of safety, considering the lack of essential knowledge concerning the relationship between effluent limitations and water quality and the lack of essential knowledge of the effects of discharges on beneficial uses of the receiving waters.

(3) A permit under this subsection may be issued for a period not to exceed five years, and such a permit may be renewed for one additional period not to exceed five years upon a demonstration by the applicant and a finding by the Administrator at the time of application for any such renewal that the provisions of this subsection are met.

(4) The Administrator may terminate a permit issued under this subsection if the Administrator determines that there has been a decline in ambient water quality of the receiving waters during the period of the permit even if a direct cause and effect relationship cannot be shown: Provided, That if effluent from a source with a permit issued under this subsection is contributing to a decline in ambient water quality of the receiving waters, the Administrator shall terminate such permit.

At the conclusion of the hearing, I got the impression that the mills were probably sorry they got the waiver and just were issued a regular NPDES permit, since the above-quoted section imposes many burdens on them that may not have been associated with a regular permit. This is only an aside and, of course, will not in any way influence my decision.

By letter dated September 22, 1987, the RA addressed the requests then before him by granting two of the five issues raised by the mills and two of the seven issued raised by the Underwater Society of America ("Underwater Society"), Nancy Taylor and other surfing and diving organizations. He denied all issues raised by Danny Wright.

The two issues raised by the mills which were accepted by the Agency are as follows:

> (1) EPA is improperly requiring the permittees to measure the toxicity of their effluents using a flow-through toxicity test. A static toxicity test would better replicate receiving water conditions. The flow-through test is technically infeasible and inappropriate to satisfy EPA's purposes. Finally, EPA abused its discretion in not deferring to the State of California's decision that the static toxicity test was appropriate.
>
> (2) EPA is requiring an inappropriate protocol for determining effluent toxicity using a sea urchin toxicity test.

The two issues raised by the Underwater Society, et al, granted by the RA state that:

> (7) Recreational uses in the receiving water will not be protected by the required level of treatment, and the recreational activity impact assessment program will impermissibly delay protection of these uses.
>
> (8) The permit effluent limitations and monitoring requirements are insufficient to protect marine life, beneficial uses and human health because of failure to use sufficiently sensitive toxicity testing organisms.

By motion dated June 18, 1990, the California Department of Fish and Game ("DFG") moved to be permitted to intervene in this matter. The DFG was concerned about the substitution of static bioassays (with daily renewal) for the flow-through tests originally specified in the permits. After the filing of a verified statement as to why the DFG did not file a timely request to intervene, the Court by order dated September 16, 1990 admitted it as a party intervenor.

The request filed by Nancy Taylor stated that she represented not only herself but a long list of surfing and diving associations including Mark Cortright and the Surfrider Association. At the

hearing, Mr. Cortright appeared pro-se, on behalf of the Humbolt Skindivers and the Surfrider Foundation was represented by Mr. Mark Massara, an attorney. Nancy Taylor appeared pro-se on behalf of the remaining requestors.

At the beginning of the hearing, it was revealed that several important witnesses for the Agency and the mills would not be available to testify at the hearing, but they would be deposed at a later time and the depositions filed as part of the record. Were it not for the participation of several non-profit groups, I would have ordered that the depositions take place in Atlanta, since the Court may have had some questions of its own of these witnesses.

Following the conclusion of the hearing, there were several motions made to augment or supplement the record with depositions and other testimony developed in the context of the Agency's ongoing civil suit in Federal Court against the mills for permit violations. Some of the motions were granted and some not. So the record continued to grow following the close of the hearing.

Also, during the pendency of this proceeding the California Water Board adopted a new ocean plan which sets forth the State water quality standards and testing protocols applicable to the mills discharge. Consequently, the Agency filed a motion dated December 20, 1990, pursuant to 40 CFR § 124.86(c), to apply the 1990 Ocean Plan to the mills. The mills did not object to the motion except for those portions which are presently being contested by them in State Court. This Court action involves the plan's adoption of the Dinnel toxicity protocol and certain dioxin

standards. The Dinnel protocol is one which the Agency urges that the Court include in the permits, a position that the mills vigorously oppose and is one of the important elements of the mills challenge to the permits. I have accepted the uncontested portions of the 1990 Ocean Plan as being applicable to the mills operation and discharge, but noted that I would not, per se, adopt the Dinnel protocol as a requirement for inclusion in the permits. In my order of June 13, 1991, I ruled that I would decide which toxicity protocol should be used by the mills following my review of the entire record and the briefs filed by the parties. It should be noted that the other parties also urged the adoption of the 1990 Ocean Plan.

The delay in rendering this decision is occasioned by two factors: (1) my heavy caseload and (2) more importantly the parallel Federal District Court case which was instituted prior to my receiving this matter. This case was brought by the Surfrider Foundation and the U.S. of America ("EPA") against the two mills for violations of the subject permits. Following the hearing the parties advised the Court that settlement negotiations were ongoing in the context of the Federal District Court case which might result in mooting some, if not all, of the issues before me. The parties suggested that I delay issuance of my decision until the final outcome of these negotiations was known. I gladly complied. The Consent Decree was issued on September 9, 1991, but could not be finalized until after the Notice and Opportunity for Public

Comment required by 28 CFR § 50.7 had been accomplished.[1]

In addition the parties later advised the Court that some other issues, not resolved by the Consent Decree, were still under discussion and might be settled. One major issue involved a possible resolution of the chronic toxicity test. However, by Notice dated April 3, 1992, counsel for the Agency advised the Court that the parties could not agree on that issue and urged the Court to proceed to issue its decision.

Prior to this notice, a majority of the parties filed with the Court on February 27, 1992 a "Joint Statement on Recommended Evidentiary Hearing Decision." In order to put the current posture of this case in perspective, its contents are set forth as follows:

> "The following parties to the evidentiary hearing have reached partial settlement of the permit issues raised in this proceeding: the EPA, Region IX, Louisiana-Pacific Corporation ("L-P"), Simpson Paper Company ("Simpson"), the Surfrider Foundation; the Humboldt Skindivers, the Central California Council of Diving Clubs (collectively, "the Divers"), and the Foundation; the Humboldt Skindivers, the Central California Council of Diving Clubs (collectively, "the Divers"), and the California Department of Fish and Game ("DFG"). Pursuant to this settlement, these parties have agreed to make certain joint recommendations to this tribunal on the Court's initial decision.

[1] A copy of the EPA Region IX Press Release summarizing the effect of the Consent Decree is attached hereto as Appendix #1.

Nancy Taylor and the Underwater Society (collectively, "Underwater Society") object to certain aspects of this settlement and do not join in this Joint Statement. Underwater Society intends to file a separate statement concerning this tribunal's decision.

This Joint Statement is subscribed by EPA Region IX, L-P and Simpson. The remaining parties have indicated their agreement with its contents to EPA Region IX and authorized EPA Region IX to submit this Joint Statement as representative of their views.

I. Joint Recommendations of EPA Region IX, L-P, Simpson, Surfrider, and DFG

EPA Region IX, L-P, Simpson, Surfrider, and DFG (but not the Divers) make the following joint recommendations with respect to the Court's initial decision:

1. L-P and Simpson do not agree that the RA's decision to issue § 301(m) permits is before the Court for decision. L-P, Simpson, EPA Region IX, and DFG agree that if this tribunal does have jurisdiction over this issue, given the undertakings by L-P and Simpson in the proposed Consent Decrees, there is no basis for terminating the § 301(m) permits.

Accordingly, L-P, Simpson, EPA Region IX, and DFG agree that L-P's and Simpson's NPDES permits, issued pursuant to Clean Water Act § 301(m), should

remain in effect until their normal expiration date, with their BOD and pH limits remaining as stated in Condition B.1.a.i. in the permits. After this expiration date, they should be reviewed for renewal using the 1990 California Ocean Plan objectives then in effect.

Surfrider agrees that if L-P and Simpson perform their obligations under the Consent Decrees as Surfrider interprets those obligations, then there will be no basis for terminating the § 301(m) permits. Accordingly, Surfrider favors allowing the permits, with their modified BOD and pH limits, to remain in effect at the present time. The permits should only be allowed to remain in effect, however, if L-P and Simpson fully comply with the Consent Decrees.

2. EPA Region IX, L-P, Simpson, Surfrider, and DFG recommend that L-P's and Simpson's NPDES permits should not be amended to require them to perform an additional recreational impact study. These parties have agreed to this recommendation because of L-P and Simpson's commitment in the proposed Consent Decrees to address potential adverse impacts on recreational uses of receiving waters.

II. The Diver's Recommendations

The Divers make the following recommendations:

1. The Divers respectfully request the Court to rule on the recreational impact issues upon which the RA granted them an evidentiary hearing, which the RA phrased as follows: "whether recreational uses in the receiving water will be protected by the required level of treatment, and whether the recreational activity impact assessment program will impermissibly delay protection of these uses."

2. The Divers believe that continuation of the § 301(m) permits is appropriately before the Court and they advocate that the current permits be terminated for the reasons stated in their post-hearing briefs.

3. The Divers agree that L-P and Simpson's permits should not be amended to require them to perform an additional recreational impact study.

III. Chronic Toxicity

In the Consent Decrees lodged with the District Court, L-P and Simpson have agreed to use the Dinnel 1987 protocol temporarily to measure compliance with the chronic toxicity limits of their current permits. The Decrees allow the mills to replace the Dinnel 1987 protocol with a draft protocol being developed by EPA biologist Dr. Gary Chapman. Beginning in June 1994, the Consent Decrees require the mills also to measure chronic

toxicity compliance with the kelp and abalone protocols unless by that time new permits with different test protocols are in effect. EPA Region IX and Surfrider have agreed to support a settlement of this proceeding which would make the chronic toxicity compliance tests of the current permits conform with the chronic toxicity provisions of the Consent Decrees. Once the Draft Chapman protocol is issued, EPA Region IX, Surfrider, L-P and Simpson expect to submit the draft protocol to the Court as part of a recommended settlement of the chronic toxicity testing issue. Dr. Chapman estimates that his protocol will be available sometime in March, 1992.

DFG's views on the chronic toxicity provisions in the mills' permits are as follows: because the Dinnel protocol is specified in the 1990 Ocean Plan, DFG believes it generally is the protocol that should be used in NPDES permits until the Ocean Plan is revised to include an update or replacement for Dinnel. DFG is willing to accept the new Chapman protocol as a general replacement for the Dinnel protocol if, after peer review, its sensitivity and reliability are shown to be equal to the Dinnel protocol, or better. For this case, DFG does not object to amending the mills' permits to provide for chronic toxicity compliance monitoring with the Chapman protocol for the remaining few months of the mills' current permits. DFG reserves all rights to

contend that the Dinnel protocol should be specified in the mills new NPDES permits which will be issued after August, 1992.

The Divers favor requiring an intra-laboratory comparison study of the Chapman and Dinnel protocols using the mills' effluents and the adoption into the mills' permits of whichever protocol is shown most stringent in this intra-laboratory study.

IV. Acute Toxicity

The parties have been and will be unable to reach any agreement on resolution of provisions in L-P and Simpson's permits concerning acute toxicity. Accordingly, the parties respectfully request a ruling from the Court upon this issue. The positions of the parties on this issue are specified in their respective post-hearing briefs.

V. Divers' Statement on Consent Decree

Divers do not support all points in the Consent Decrees; especially the proposed outfall extensions for L-P. Divers do support the tactics used in the Simpson Decree, in which outfall extension is used only as a last resort."

Subsequently both EPA and the mills filled on April 3 and 7, respectively, statements concerning their positions on the chronic toxicity issue. The Agency's position is that the Court should rule on this issue in accordance with their previously filed post-

hearing briefs. The mills advised that in accordance with the Consent Decree they have been testing the reliability of the Chapman protocol which is theoretically a refinement of the 1987 Dinnel protocol utilizing a sea urchin sperm bio-assay. The mills state that the results of their experiments reveal that the Chapman protocol has serious flaws which will prevent it from being used for compliance monitoring. The mills say that it is their understanding "that EPA has deferred issuance of the Draft Chapman protocol indefinitely to allow further evaluation of the relevant scientific and technical issues." They go on to state that:

> "The problems observed with the draft Chapman protocol have reaffirmed the position of L-P and Simpson that there is no scientifically valid sea urchin bio-assay currently suitable for chronic toxicity compliance monitoring. Until a workable sea urchin bio-assay becomes available, L-P and Simpson will be unable to settle with EPA and Surfrider on the chronic toxicity issue in this proceeding."

Their statement then goes on to argue their position on this issue. The statement contains the following language which provides some useful historical perspective:

> "On February 21, 1992, L-P and Simpson joined with EPA Region IX in submitting a Joint Statement on Recommended Evidentiary Hearing Decision ("Joint Statement") to this Court. In discussing the chronic toxicity issue, the Joint Statement explained that under the Consent Decrees lodged with the District Court, L-P and Simpson have agreed to use the

Dinnel 1987 protocol temporarily to measure compliance with the chronic toxicity limits of their current permits. The L-P Consent Decree requires L-P to replace the Dinnel 1987 protocol with the Draft Chapman protocol two months after the latter protocol is issued by EPA. The Simpson Consent Decree gives Simpson the option to replace the Dinnel 1987 protocol with the Draft Chapman protocol.

Under both Consent Decrees, EPA Region IX and Surfrider agreed to support a settlement of the evidentiary hearing that would make the chronic toxicity compliance tests of the Companies' current permits conform with the chronic toxicity provisions in the Consent Decrees. Thus, the Joint Statement indicated that "[o]nce the draft Chapman protocol is issued, EPA Region IX, Surfrider, L-P, and Simpson expect to submit the draft protocol to the Court as part of a recommended settlement of the chronic toxicity testing issue. Dr. Chapman estimates that his protocol will be available sometime in March, 1992." Joint Statement, at 4-5.

By a filing dated June 22, 1992, counsel for L-P forwarded to the Court the long-awaited decision of the Superior Court of California on the contested portions of the State's 1990 Ocean Plan, noted above. The Court, in essence, ruled that the Dinnel protocol does not meet the tests required by the Board and is therefore no longer an approved test method under the current California Ocean Plan, Simpson Paper Company v. State of California Water Resources Control Board, No. 364016, Slip Op. (California

Superior Court, June 15, 1992.

It is not clear, however, just what effect the Court's ruling in Simpson, supra has on the Consent Decrees, arising from the Federal District Court case which direct the mills to use the Dinnel 1987 protocol for chronic toxicity testing until such time as the Chapman protocol is issued. My reading of the Consent Decrees seems to suggest that the Dinnel 1987 protocol is still the one that the mills must utilize until future events mandate a change. Paragraphs 25, 26, 27, and 28 of the L-P and Simpson Decrees attempt to address the fate of the Dinnel 1987 protocol given a variety of future scenarios. None of the scenarios mentioned involve what would happen if the California Court should reject Dinnel 1987 even though all parties knew that the mills had brought a State Court case challenging that protocol. Given that situation, I conclude that the parties felt that the State Court decision would have no bearing on the Consent Decrees or alternately they could not agree on the effect of the State Court's ruling on the utilization of the Dinnel 1987 protocol. Since all parties, except the mills, were urging this Court's adoption of the Dinnel 1987 protocol before it was officially adopted by the California Water Board, I am of the opinion that the State Court's ruling has no effect on the mills' obligation under the Consent Decrees to use the Dinnel 1987 protocol. Although the mills now say that they agreed to utilize the Dinnel 1987 protocol in the Consent Decrees because they expected the Chapman protocol to address their original concerns with the Dinnel tests, I am not

persuaded that such an assertion can now relieve them of their negotiated agreement to use Dinnel for an undetermined period of time. Thus, as far as I am concerned the issue of which chronic toxicity protocol shall be put in the permit has been resolved by the parties in the Consent Decrees. I see no reason to disturb the parties' agreements.

Having concluded that the mills are obliged under the terms of the Consent Decrees to continue using the Dinnel 1987 test protocol, I am not entirely satisfied that the Dinnel test is the best one to be used on an exclusive basis. EPA and the other parties arguments to the effect that although the Dinnel 1987 protocol has not been officially adopted by any national testing authority and does exhibit certain anomalies, it can still be legally used as a compliance tool in NPDES permits is true, but is not without flaws. During the course of the hearing and in their post-hearing briefs the mills vigorously argued that, although the purple urchin sperm is a highly sensitive species, the test protocols, as presently used, produce erratic and unreliable results. Apparently, this is related in part to the long duration of the test and the length of time the sperm are held before introducing them to the effluent. As pointed out by the mills, in some cases, the sperm are more adversely affected by pure ocean water than they are by the plant's effluent. The Court in the Simpson case, supra, ruled that the 1987 Dinnel protocol was invalidly adopted by the State Board because it had not been subjected to "intra-laboratory comparisons" as required by law.

The Court also commented on the long holding time used in the Dinnel test (150 minutes) and the long exposure time (60 minutes) which seems to metabolically deplete the sperm, giving unreliable results. The other tests mentioned by the Court involve keeping the sperm on ice and then incubating them in the test solution for 10 minutes without the eggs and 10 minutes with the eggs. The other two tests are the Anderson and Weber protocols. See pages 36-38 of the Court's opinion.

At the hearing and in their post-hearing briefs, EPA argued vigorously for the inclusion of the mussel/oyster test as one of a suite of chronic toxicity tests to be used in these permits. Although the Court was not privy to the negotiations among the parties which resulted in the above-cited Consent Decrees, no mention of this test appeared in any documents which the Court received. The ASTM mussel/oyster test is one which has been approved by authoritative bodies. ASTM stands for American Society for Testing Materials, which means that it has undergone the rigors of scrutiny required by that group and is underwritten by it. Although the EPA is currently requiring the permittees to use this test with the mussel Mytilius Californianus, the 1990 Ocean Plan (p. 22) suggests the use of the mussel Mytilius edulis (bay mussel) or the pacific oyster, crassotrea ginas. There does not appear to be any significant difference between the sensitivity of these species. Since this test, which is approved by the Ocean plan, ASTM and EPA, is seemingly well-established, I am of the opinion that it should be used by the mills in conjunction with the 1987

Dinnel test. Since the mills already have some data using a modified version of this test, its use in the current and future permits should provide valuable long-term information as to its reliability for compliance monitoring. Should its utilization demonstrate a higher degree of reliable results than the 1987 Dinnel protocol, the EPA is free to cease using the Dinnel test and rely on the mussel/oyster test to measure toxicity compliance. If the Chapman protocol is finally developed and issued, then, of course, the terms of the Consent Decrees would allow its substitution for the Dinnel test.

Due to the apparent delay in issuing the Chapman protocol, I see no reason to postpone the imposition of the Kelp and Abalone tests until 1994. I am of the opinion that such tests should be included in the mills' current permits and also be placed in their new permits. I realize that the mechanisms for designing and beginning such tests will require some period of time. However, the sooner one starts the sooner one is finished. By placing the requirement in the current permits, the mills will be required to commence the institution of these tests earlier.

As to the recreational studies, I agree that under the terms of the Consent Decrees the mills are obliged to remedy the problem. Since all parties seem to agree that the original study was not very effective and that skin patch tests are not recommended due to possible toxic effects from Dioxin, no benefit would result from additional studies. According to the Joint Statement on Recommended Evidentiary Hearing Decision, (February 21, 1992), the

Divers urge the Court to rule on the recreational impact issue as granted by the RA. Reading the issue as articulated by the RA, I am of the opinion that it has, for all practicable purposes, been mooted by the Consent Decree. Clearly, the mills discharges have an adverse effect on legitimate recreational uses of the involved waters and beaches. The record in this case demonstrates that the following adverse impacts have been shown: odor and taste in the water and on the beach (odor); foam in the surf; discoloration of the water interfering with underwater sports activities; discomfort to water users, such as skin and eye irritation. Due to the inadequate design of the recreational study and its short duration, one can only speculate as to any health effects associated with exposure to the mills' effluent. However, given the effluent's known constituents one can assume that long-term exposure thereto by humans is certainly not beneficial.

ACUTE TOXICITY TESTING

The above-cited Joint Statement, states that the parties cannot agree on this issue, and ask the Court to rule on it, in accordance with their previously filed briefs.

At this juncture, it may be helpful to briefly discuss this whole notion of biological toxicity testing. First of all their use (also called bioassays) is not a new phenomenon. They have been put in permits for many years. Their purpose is obvious. Where a facility discharges a complex effluent whose precise composition is not known or whose constituents are suspected of having adverse effects on the environment, their use provides a

means of measuring and documenting such effects which may require changes in the effluent. Where in an aquatic environment, such as an ocean, which contains a wide variety of organisms, the regulators want to choose the most sensitive species as the test organism so that all organisms exposed can be protected. The regulated community would prefer an organism which they hope will survive exposure to their effluent and yet be a reasonably sensitive critter. Clearly, the common river carp is not a good candidate.

EPA and most scientists agree that the sea urchin sperm is a highly sensitive organism and thus many of the protocols developed for marine testing use them. The same rational is true for acute toxicity testing. The only difference is the design of the test and the fact that short-term rather than long-term adverse effects are being tested for.

The acute toxicity issue involves three sub-issues. The threshold sub-issue is whether or not the permits should even contain such a test. The mills argue that the 1990 Ocean Plan, which all parties agree should be applied to these permits, does not require an acute toxicity test for discharges such as the mills and therefore EPA should not include one in their permits.

EPA and the other parties urge the inclusion of an acute toxicity test in order to protect the delicate marine environment into which the mills discharge. As to the mills' argument that since such a test is not included in the 1990 Ocean Plan it shouldn't be put in the permits, EPA, et al argue that the test's

exclusion in the Ocean Plan is essentially irrelevant. Their argument has several thrusts. Firstly, they say that the Ocean Plan is merely advisory in the selection of test schemes and that, in any, event, EPA has the authority to add more stringent requirements to a permit it issues if it determines that such are necessary to adequately protect the waters of the United States. I agree. This argument is consistent with well-established EPA permit writing procedures. If for example, a State does not have a water quality standard for a particular chemical, the EPA is not prohibited from placing a limit for that chemical in a permit it issues. It is also conceivable that EPA-established effluent limitations will require a facility to reduce its effluent levels of various components far below those required by existing State water quality standards. I find nothing in the Act or the regulations promulgated thereunder which would suggest that the EPA is so limited. On the contrary, subsection (1)(c) of § 301(m), supra, requires the permittee to establish a system for monitoring the impact of its discharges on marine biota. This requirement is separate and in addition to the requirement found later in the section relating to the implementation of State water quality standards.

The EPA also argues that the portion of the Ocean Plan which does require acute toxicity testing should apply to these permits even though on its face the requirement only applies to dischargers for whom no effluent guidelines have been established pursuant to § 304(b) of the Clean Water Act. Effluent guidelines have been

established for bleached kraft pulp mills. However, EPA argues that because of their § 301(m) waivers, which allows them to exceed the limitations for BOD and pH, they are more akin to dischargers for whom no guidelines have been developed. I agree. The unique nature of these permits (a situation not addressed by the Ocean Plan) authorizes the EPA to assure itself and the public that a balanced, indigenous population of aquatic biota is protected. The record reflects that the mills' effluent although generally typified as homogenous does exhibit spikes or peaks of high levels of toxic constituents which would not be measured by a chronic test alone.

Accordingly, I am of the opinion that EPA has the authority to include an acute toxicity test in the subject permits.

The next sub-issue has to do with the selection of the proper animal to use in the test. The 1983 Ocean Plan stated that the three-spine stickleback and the minnow fish golden shiner were the only species recommended for acute toxicity studies. The 1990 Ocean Plan's functional equivalent document, which accompanied the promulgation of the Ocean Plan, indicates that minnows or stick'.backs are "typically" used in such tests. The plan itself is silent on just what species should be used.

Given this scenario, the mills state that the 1983 Plan should govern. The other parties say the 1990 Plan should rule, which version essentially leaves the decision up to the exercise of best professional judgement. See 40 CFR § 122.44(i)(1)(iv).

There is ample evidence in this record to conclude that the

stickleback is an inappropriately insensitive species which conclusion would, in my judgement, render it as an improper species to use in this test. Even the mills' expert witness Mr. Paul Dinnel stated in his deposition taken in the California District Court case, supra, that it should no longer be used for compliance testing (at 257, lines 5-23) other expert witnesses concurred, i.e. Donald Segar and Chapman. The California State Water Resources Control Board also has rejected the stickleback as suitable species because of its insensitivity to industrial effluents. See Acute Toxicity Bioassays, (May 1979). Dr. Dinnel in his deposition, supra, stated that, " I find it very difficult to believe that sticklebacks are still being used for testing effluents." He likened the stickleback to other formerly used species that could only be killed by tossing them out the front door and letting a truck run over them. I suppose that the stickleback may be tougher than the common river carp.

Accordingly, I am of the opinion that: (1) the stickleback is not an appropriate species to be used in the acute toxicity testing scheme and (2) some species of the mysid shrimp should be used. The holmesmysid costata species is a good candidate. Should some unforseen problem arise with that species, the permits could authorize the use of menidia beryllina as an alternative. Although not as sensitive as the mysid it is one to which even the mills posed no objection.

The third sub-issue involves the choice of the appropriate test methodology. By that I mean the method by which the animals

are exposed to the effluent. These methods are (1) static test wherein the liquid medium is only changed infrequently, (2) the static renewal method, where in the medium is changed or added to with greater frequency and (3) the continuous flow-through method which is self descriptive in that is uses a fresh supply of actual effluent on a flow-through basis.

The mills favor the static method for several reasons: (1) it is cheaper, (2) they have previous experience with it and(3) it doesn't require the services of a Ph.D marine biologist to run. It was noted that even a lawyer could do it.

EPA and the other parties prefer the continuous flow-through method because they believe that it more accurately measures the effects of biota exposed in the real environment. It should be noted that this is the method specified in the current permits and was contested by the mills.

The record shows that the mills have also been experimenting with the static renewal method in recent years but one can only speculate as to whether this represents an acceptance of this methodology over the static method.

In any event EPA argues that should the Court reject the stickleback as a test species, the decision as to which methodology to be used with that species has been rendered moot (brief at 88). Continuing on with that logic EPA asserts that during the hearing the mills own expert (Segar) testified that the mills primary objection to using a flow-through system with the stickleback involved the difficulty in maintaining proper salinities at the

high concentrations of effluent required to calculate toxic concentrations of mill effluent. (Tr. Vol. III @ 144 and 193-194.) This witness acknowledged that this problem would be eliminated if a more sensitive species such as mysid shrimp were to be used, since there would be no need to use such high concentrations of the mill effluent. (Tr. Vol. III @ 194.) This testimony certainly reinforces the notion that the stickleback is indeed a very hardy animal. This same mill witness also acknowledged that the continuous flow-through method is environmentally preferable since it can detect "spikes" or "slugs" of effluent toxicity. A phenomenon that all parties agree does occur.

Since I have eliminated the stickleback as a suitable test species, I agree with EPA that the mills' objections to the flow-through using that species are no longer viable. Additionally, given the nature of the mills' effluent i.e., it is variable in composition, has volatile components or is reactive and contains toxic compounds such as dioxin, it is not a good candidate for static testing methodology. All experts agree that under the circumstances present in this case the use of a flow-through methodology is environmentally preferable even though it is more expensive to perform. The record clearly demonstrates that such a methodology is solidly established in the scientific literature and actual usage and thus its utilization here does not present a precedent breaking or theoretical proposal.

Accordingly, it is my opinion that this record supports the use of a continuous flow-through methodology to be used in the

acute toxicity monitoring tests to be placed in these permittees current and future permits.

CONCLUSION

Based upon this entire record, including the supplemental filings made by the parties, I make the following findings and directives:

(1) The current permits should be continued and not revoked so long as the terms of this order and the Consent Decrees are complied with.

(2) The permits shall include an acute toxicity test utilizing some species of the mysid shrimp in a continuous flow-through setting.

(3) The mills are obliged by the terms of the Consent Decrees and this order to continue to utilize the Dinnel 1987 protocol for chronic toxicity testing unless future events alter that conclusion.

(4) The kelp and abalone tests shall be placed in the current and future permits and implemented by the mills as soon as physically feasible.

(5) The ASTM mussel/oyster test shall be placed in the permits to be used in conjunction with the Dinnel 1987 protocol as discussed above.

(6) There appears to be no need to conduct another recreational study since the concerns voiced by the parties involving that issue are resolved by the Consent Decrees. It should be noted that not all parties agree totally with these

Decrees.

(7) The content of the Decrees, as modified by this decision, are adopted by the Court and shall be incorporated into the subject permits.[2]

Dated: 7/27/92

Thomas B. Yost
Administrative Law Judge

[2] 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.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

Pulp Mill Settlement Fact Sheet
September 1991

This enforcement action consists of four separate Consent Decrees, each involving a different set of players:
(1) the U.S. Environmental Protection Agency (EPA), the Surfrider Foundation, and Louisiana-Pacific Corporation;
(2) EPA, Surfrider Foundation and Simpson Paper Company;
(3) Surfrider Foundation and Louisiana-Pacific Corporation; and
(4) Surfrider Foundation and Simpson Paper Company.

The two decrees involving both EPA and the Surfrider Foundation (#1 and 2 above) share the following commitments:
* Louisiana-Pacific and Simpson will each pay a $2.9 million civil penalty to the U.S. treasury, for a total of $5.8 million.
* The companies will drop their challenge to their permit conditions requiring chronic toxicity testing.
* Both companies will evaluate the effectiveness of various toxicity treatment methods by April 3, 1992 and will each subsequently select and install a treatment system to reduce the toxicity of the effluent discharged by their respective pulp mills by March 16, 1994.

In addition, the consent decree involving EPA, the Surfrider Foundation and Louisiana-Pacific (#1 above) specifies the following conditions:
* Louisiana-Pacific must extend the current outfall from its pulp mill by October 15, 1993 to the length necessary to keep the nearby surf zone (where water recreation occurs) effluent-free.
* Louisiana-Pacific will analyze the feasibility of further changes in its mill's processes to reduce the use of chlorine in its pulp bleaching process. (Reductions in chlorine use will decrease the level of dioxin and furans, by-products of the chlorine bleaching process, in the effluent.) EPA is currently working on establishing dioxin permit limits for Louisiana-Pacific; this study will help ensure that Louisiana-Pacific will be able to meet these forthcoming limits.

The consent decree involving EPA, Surfrider Foundation and Simpson Paper Company (#2 above) commits to the following additional actions:
* Simpson will extend the outfall from its pulp mill unless it can prove to EPA's satisfaction that they can adequately treat their discharge to eliminate any

possible health impacts.
- Simpson has until September 1, 1992 to demonstrate the feasibility of treatment techniques to adequately treat its effluent such that it is safe for human contact.
- If EPA approves treatment, Simpson must install the necessary treatment systems by March 16, 1994.
- If Simpson's wastewater cannot be adequately treated, Simpson must extend its outfall beyond the surf zone by October 1994 (or earlier, depending upon the time required for a CEQA determination).

* Simpson will substantially reduce or eliminate chlorine bleaching from its pulping process (which, consequently, will substantially reduce or eliminate dioxin and furans from its effluent) by December 1, 1992.
* Within six months after the court approves the consent decrees, Simpson will fund an independent plant-wide environmental audit and install measures recommended by the auditors to correct any pollution problems detected during the audit.

In the consent decrees involving Surfrider Foundation and the pulp mills (#3 and 4 above), the companies agree to the following:
* Louisiana-Pacific and Simpson will pay the Surfrider Foundation $500,000 for attorney's fees.
* The companies will contribute $350,000 toward the creation of a recreational facility on federal land located near the companies' mills. This facility, which will be open to the public, will include camping facilities, a small conference room, and solar-assisted showers.
* Simpson will produce its environmental compliance reports on partially recycled paper.

Contact: Lois Grunwald
Office of Public Affairs
U.S. EPA Region 9
(415) 744-1588

CERTIFICATION OF SERVICE

I hereby certify that, in accordance with 40 C.F.R. § 22,27(a), I have this date forwarded via certified mail, return-receipt requested, the Original of the foregoing **INITIAL DECISION** of Honorable Thomas B. Yost, Administrative Law Judge, to Mr. Steven Armsey, Regional Hearing Clerk, Office of Regional Counsel, United States Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, California 94105, 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, he 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: 7/27/92

Jo Ann Brown

Jo Ann Brown
Secretary, Hon. Thomas B. Yost

CERTIFICATE OF SERVICE

I hereby certify that the foregoing INITIAL DECISION of the Presiding Officer, Thomas B. Yost, in the matter of Louisiana-Pacific Corporation and Simpson Paper Company (NPDES-09-87-0005), dated July 27, 1992 has been filed with the Regional Hearing Clerk, and a copy was served on Counsel for EPA, and on the other parties, as indicated below:

BY FIRST CLASS MAIL:

The Mills-	Gary J. Smith, Esq. BEVERIDGE & DIAMOND One Sansome Street (Suite 3400) San Francisco, CA 94104
	Marc A. Zeppetello, ESQ. Law Office of Karl R. Morthole 100 Broadway (Third Floor) San Francisco, CA 94111
Surfrider Foundation-	Mark A. Massara, Esq. SURFRIDER FOUNDATION 1642 Great Highway San Francisco, CA 94122
Underwater Society-	Mark Cortright UNDERWATER SOCIETY OF AMERICA 212 Liscom Hill Road Arcata, CA 95521
California Dept. of Fish and Game-	Ann Malcolm Resources Agency-Cal. Dept Fish & Game 1416 Ninth Street (12th Floor) Sacramento, CA 95814
Central Calif. Council of Diving-	Nancy Taylor P.O. Box 690 Cedar Key, FL 32625

HAND DELIVERED:

EPA Counsel-	Christopher A. Sproul, Esq. Office of Regional Counsel ENVIRONMENTAL PROTECTION AGENCY 75 Hawthorne Street San Francisco, CA. 94105

Dated at San Francisco, Calif., this 5th day of August, 1992.

Steven Armsey
Regional Hearing Clerk
EPA, Region 9