Subject: Fwd: don't use pesticide treated wood products in fisheries or marine buildings

From: SWR.Treatedwood@noaa.gov Date: Wed, 25 Mar 2009 10:10:52 -0700

To: Joseph.J.Dillon@noaa.gov

Subject: don't use pesticide treated wood products in fisheries or marine buildings

From: "Berthiaume, Denise" <dberthia@umich.edu>

Date: Mon, 16 Feb 2009 10:50:18 -0500

To: "'SWR.treatedwood@noaa.gov'" <SWR.Treatedwood@noaa.gov>

This serves as my official comment on this issue.

There is already way too much pollution harming our oceans and waters, and we shouldn't allow more. Do not allow pesticide treated wood.

Denise Berthiaume
Director, Information Technology
School of Nursing
dberthia@umich.edu
734-647-0354

don't use pesticide treated wood products in fisheries or marine.eml

Content-Type:

message/rfc822

Content-Encoding: 7bit

Subject: Fwd: Comments on draft guidelines

From: SWR.Treatedwood@noaa.gov Date: Wed, 25 Mar 2009 10:09:54 -0700

To: Joseph.J.Dillon@noaa.gov

Subject: Comments on draft guidelines

From: "DeVenzio, Huck \*\*SMYR" <HDevenzio@archchemicals.com>

Date: Fri, 27 Feb 2009 08:32:17 -0600

To: "SWR.treatedwood@noaa.gov" <SWR.Treatedwood@noaa.gov>

I will leave the technical issues to scientists better qualified to handle them, but I would like to comment on the eventual use of the guidelines. I understand that the draft document contains a wealth of useful information, but may not provide adequate guidance for a local official faced with a decision on the use of treated wood in a specific project.

I'm part of the treated wood industry. When our industry began discussions with NMFS on a guidance document, it was with the hope that such a document would eliminate misperceptions and prejudices and simple lack of information that might exist in regional and local offices. We felt that permitting could be streamlined and decisions could be justified by creation of guidelines that lead to determinations unaffected by personal preferences.

I believe our original aim remains valid, and I urge you to make sure that the final guidelines will lead to efficient, consistent, unbiased decisions.

I realize that it is impossible to prescribe solutions for all possible situations, but I hope the final guidelines will enable an official to evaluate the expected impact of the preservatives and, where appropriate, promptly approve the use of treated wood that is properly produced.

Please write the guidelines so they facilitate decisions, rather than creating another compendium of scientific information that adds input without direction to the decision-making process.

Huck DeVenzio Arch Wood Protection 770-805-3215

Comments on draft guidelines.eml

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Content-Encoding: 7bit



1111 19<sup>th</sup> Street, NW Suite 800 Washington, DC 20036 Phone: (202) 463-2045 Fax: (202) 463-2059

(Delivered electronically to <u>SWR.treatedwood@noaa.gov</u>.)

March 5, 2009

US Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service Attn: Water Quality Coordinator/Treated Wood Comments 777 Sonoma Avenue, Suite 325 Santa Rosa, CA 95409

Re: Draft Guidelines for the Use of Treated Wood Products in Aquatic Environments

#### Dear Sir/Madam:

The Treated Wood Council (TWC) is pleased to submit these comments in response to the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) January 13th notice in the Federal Register (pages 1663-4), regarding draft Guidelines for the Use of Pesticide-Treated Wood Products in Aquatic Environments (draft dated December 5, 2008).

TWC is an international trade association serving the treated wood industry with more than 380 member organizations, including 184 companies who treat products with EPA-registered wood preservatives.

In general, TWC believes that the draft Guidelines represent a strong statement on the acceptability of treated wood for use in many aquatic applications.

TWC is concerned however, that the draft Guidelines lack a clear set of procedures by which field inspectors and scientists might evaluate potential applications in an objective, efficient manner. A set of delineated procedures would yield a consistent determination on which projects are environmentally suitable for treated wood use, and which might warrant a more in-depth analysis.

Treated Wood Council urges NOAA/NMFS to work with the treated wood industry and other interested stakeholders to develop and implement a "field checksheet".

We appreciate the opportunity to submit these comments to the National Marine Fisheries Service. We are available to meet and discuss these items with you at any time. Please contact me if you have any questions.

Respectfully,

Jeffrey 7 Miller President 9 7 President & Executive Director

cc:



# Florida Department of Agriculture and Consumer Services CHARLES H. BRONSON, Commissioner The Capitol • Tallahassee, FL 32399-0800 www.doacs.state.fl.us

Please Respond to:
Division of Aquaculture
1203 Governor's Square Blvd, Fifth Floor
Tallahassee, Florida 32301

March 5, 2009

Mr. Joseph Dillon Southwest Region Water Quality Manager National Marine Fisheries Service 777 Sonoma Avenue, Suite 325 Santa Rosa, California 95409

Dear Mr. Dillon:

We respectfully request that the *Draft Guidelines for the Use of Pesticide-Treated Wood Products* be amended to limit their implementation to the Pacific Coast region.

The Division is charged with the responsibility of conserving and protecting Florida's natural resources relative to the management of commercial aquaculture facilities. We enforce specific requirements relative to the construction and placement of wooden docks to a maximum size of 2,000 square feet. These docks are located on sovereignty submerged lands for aquacultural purposes. We enforce current state and federal requirements for docks of this size and smaller. Florida dock construction utilizes wood treated with copper-based compounds.

Environmental fate data for the Pacific Coast and salmonid toxicological data are the sole sources of information utilized to create the draft guidelines relative to copper treatments. Salmonids do not live or frequent Florida waters but anadromous listed species are found here and additional anadromous species may be listed in the future.

If guideline implementation is proposed for the Southeastern United States, then similar toxicological work must be performed for listed anadromous species in this regions as well as analysis of wood preserving methodology, certification, and copper compound environmental fate data as well as applicability of the proposed Best Management Practices to conditions and dock construction standards of this region. We are very concerned that inappropriate application of these guidelines will occur and request that the guidelines be amended to clearly confine their application to the Pacific Coast.

Sincerely.

R. Sherman Wilhelm, Director

Division of Aquaculture

Roy Crabtree, Regional Administrator, National Marine Fisheries Service

Jessica Beck, SE Regional Aquaculture Coordinator, NMFS

Dennis Howard, Chief, Bureau of Pesticides

Marty Tanner, President, Florida Aquaculture Association

Statewide Clam Industry Task Force

Fresh Florida Forest Service Forest Products Laboratory One Gifford Pinchot Dr. Madison, WI 53726-2398

March 12, 2009

National Marine Fisheries Service 777 Sonoma Avenue Suite 325, Santa Rosa, CA 95409

Attn: Water Quality Coordinator/Treated Wood Comments

I am writing in regards to NMFS's request for comments on the "Draft Guidelines for Use of Pesticide-Treated Wood Products" as posted in the Federal Register on January 6, 2009.

Its evident that considerable time and effort has been expended in reaching this point, and these efforts are appreciated. My concern is that guidelines appear to more of a literature review than a guide, and provide little or no specifics for criteira used to evaluated the acceptability of projects. Instead, they continue to require a site-specific assessment of every project on a case-by-case basis. From a practical standpoint this leaves us at the same place we were several years ago, before this process started. Our Forest Service engineers still will not have criteria to use in predicting whether or not a project is likely to cause concern, and it is more likely that NMFS personnel will be inconsistent in evaluating projects. For the Forest Service this will result in uncertainy, time delays and additional expense.

The guidelines would be much more useful if they contained a few simple criteria, or a decision tree, that both Forest Service and NMFS personnel could use to predict whether a project is likely to be problematic. The conclusion of the draft guidelines does state that many projects "may pass a screening level examination and require relatively little assessment" but no critiera are defined. For example, it is evident from the guidelines document that NMFS believes wood volume and water volume/flow rate to be key factors in evaluating impacts. (I recoginize that conditions do differ along the west coast, but all of the data, and statements within these draft guidelines, indicate that there are combinations of wood volume and water flow that are unlikely to cause concerns). Using the existing data and models developed by Poston and/or Brooks, a small matrix table (or equation) should be created to show which combinations of wood volume and water are likely to pass a screening level evaluation. Alternatively, a series of questions or simple decision tree could be developed to classify potential projects. Either approach would allow our engineers to anticipate in advance when designing a project with treated wood might not be a good idea.

Considerable time and effort has been expended in the process of developing these draft guidelines. I urge NMFS to make the relatively small additional effort needed to make the guidelines useful by incorporating simple screening level criteria.

Sincerely,

Stan Lebow

Team Leader, Wood Preservation Research

Phone: 608-231-9411 Fax: 608-231-9592 e-mail: slebow@fs.fed.us



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#### BEFORE THE

# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) NATIONAL MARINE FISHERIES SERVICE

DRAFT GUIDELINES FOR U	SE OF PESTICIDE TREATED WOOD PRODUCTS
COMMENTS OF THE A	ASSOCIATION OF AMERICAN RAILROADS

On behalf of its member railroads, the Association of American Railroads<sup>1</sup> (AAR) submits the following comments on NOAA's proposed guidelines for the use of pesticide treated wood products<sup>2</sup>. Freight railroads operate over 140,000 miles of track in the United States<sup>3</sup>. A vast majority of this track uses creosote treated crossties for the track structure. In addition, the US railroads have thousands of bridges that cross waterways, and most of these bridges have pilings made out of creosote treated wood. There are also many open deck bridges with creosote treated crossties in the track structure. Hence, the railroads have a vested interest in these draft guidelines.

Page 26 of the draft guidelines recommends that "Exposed wood, used in overwater applications (such as decking) should be protected from the weather and an application of water repellent sealer is recommended by industry (WWPI 2003) and agencies (NMFS 2004b, 2003, Lebow and Tippie 2001, USDA FPL 2001)." Two of AAR member

<sup>&</sup>lt;sup>1</sup>A trade association whose membership includes freight railroads that operate 72 percent of the line-haul mileage, employ 92 percent of the workers, and account for 95 percent of the freight revenue of all railroads in the United States; and passenger railroads that operate intercity passenger trains and provide commuter rail service.

<sup>&</sup>lt;sup>2</sup> 74 Fed. Reg. No. 8 (January 13, 2009) pages 1663-1664

<sup>&</sup>lt;sup>3</sup> Railroad Facts - 2008 Edition, AAR, pg.3.

railroads which own over 43,000 miles of track have estimated that the cost to apply this best management practice would be approximately \$19 million (i.e. \$35.00 per tie). Extrapolating that cost to the entire railroad network, assuming that the other railroads would have a similar number of open deck bridges impacted, would mean a total additional cost to the industry of nearly \$62 million.

One of our member railroads estimated that if they had to replace all the creosote treated wood pilings in aquatic environments with steel pilings, the cost to that railroad alone would be approximately \$2 billion. That one railroad estimates that they have 100 miles of bridges with treated wood pilings. Again, extrapolating that cost across the entire industry would result in a total additional cost to the industry of \$10.5 billion. While NOAA is not recommending replacement of all treated wood pilings, this gives the agency an idea of the magnitude of the cost impact to just railroads if the use of creosote treated pilings were prohibited.

In addition, AAR supports the comments submitted to NOAA on the subject document by the Creosote Council. AAR coordinates closely with the Creosote Council on issues impacting creosote treated wood. While AAR's members have been looking for alternatives to creosote treated wood crossties, use concrete crossties in some circumstances, and are testing some plastic crossties, the creosote treated crosstie is the predominant crosstie in use in the US rail industry. We support best management practices (BMP's) in the production of creosote treated wood, and would encourage

NOAA to limit BMP's to those practices that can be cost effectively utilized in production unless a site specific risk assessment determines otherwise.

AAR appreciates NOAA's consideration of our comments.

Respectfully submitted,

Robert E. Fronczak, P.E.

Assistant Vice President Environment & Haz Mat

Association of American Railroads

Tobat Etroyal

50 F Street, N.W.

Washington, DC 20001

Phone: 202-639-2839

Email: RFronczak@aar.org

March 16, 2009

c: AAR Environmental Affairs Committee

National Marine Fisheries Service 777 Sonoma Avenue, Suite 325 Santa Rosa, CA 95409 Attn: Joe Dillon, Water Quality Coordinator

FAX: 707-578-3435

EMAIL: SWR.treatedwood@noaa.gov

RE: Comments by Creosote Council on NOAA's Document "The Use of Pesticide-treated wood products in aquatic environments: Guidelines to NOAA Fisheries Staff for the Endangered Species Act and Essential Fish Habitat Consultations"

This NOAA Fisheries draft guidelines document applies to wood products pressure treated with creosote or the copper based systems including Chromated Copper Arsenate (CCA), Ammoniacal Copper Zinc Arsenate (ACZA), alkaline copper quat (ACQ) or Copper Azole (CA-B).

However, Creosote Council has issues with the document that is referenced in the Federal Register (January 13, 2009). The comments that follow are being offered to assist in the development of "draft guidelines for aquatic uses of treated wood" that can be used by those in the field who actually write the permits.

We support the effort to develop "a guidance document" that has been put forth by the treated wood industry – lead by the Western Wood Preserves Institute (WWPI). The continued aquatic use of treated wood products is extremely important to our Nations economy. Let us not forget that wood is the only structural renewable engineered product that is available for use in the aquatic environment.

Our comments to this document will focus only on creosote. Many of our comments are made in an effort to provide a partial record of concerns with the document. Our one great concern is with the water and sediment quality benchmarks inferred in the document. The use of the TEL and ER-L as sediment quality benchmarks is unacceptable and that conclusion has repeatedly been reached by many others in this scientific field.

Before discussing specific page references within the NOAA document, note that the Creosote Council strongly objects to the use of the term – "pesticide-treated wood" – in the title and throughout the text of the proposed guidelines. Wood products covered by the proposed guidelines are commonly referred to as "treated wood" or "preservative-treated wood." We have <u>never</u> seen treated wood referred to as "pesticide-treated wood." That term is misleading because it erroneously implies wood treated with a FIFRA-registered wood preservative acts like a pesticide (i.e., controls or repels fungi, insects or other pests). To the contrary, wood is treated with FIFRA-registered wood

preservative, such as creosote, in order to protect wood from degradation and is specifically exempt from FIFRA regulation as a pesticide under EPA's treated articles exemption. See 40 C.F.R. 152.25(a). Further, the term "pesticide-treated wood" carries a negative connotation, which is unjustifiable in view of EPA's recent determination that creosote meets the FIFRA statutory standard for reregistration as a wood preservative.

Further we object to the heavy reliance on the flawed Stratus Report. Creosote Council hereby incorporates by references it May 2, 2006 comments discussing the numerous flaws in the draft Stratus Report. Despite the objections of the Creosote Council, WWPI, and other comments regarding the lack of scientific quality and review process of this report, the draft guidelines repeatedly cite the Stratus Report.

The following is a page by page critique of specific items:

- 1. On page 3, first paragraph of "Introduction", components of wood preservatives are referred to as "contaminants". These are EPA registered chemicals for use as wood preservatives; they are not "contaminants". In addition, it is not correct that the components of creosote are EPA-registered pesticides. It is the "whole" creosote that is an EPA-registered pesticide.
- 2. As indicated above on Page 13. The Threshold Effects Level (TEL) and Effects Range Low (ER-L) are not appropriate sediment quality benchmarks by any standard. Washington State has published EPA approved marine Sediment Quality Criteria (SQC) in WAC 173-204 and is currently developing freshwater Sediment Quality Values (WDOE 2002, 2003). Goyette and Brooks (1998, 2000) conducted a detailed assessment of the efficiency and protectiveness of a range of possible SQC applicable to the Sooke Basin Study. Similar to WDOE (2002, 2003) they found that the TEL and ER-L were unacceptably inefficient because they predicted far too many toxic effects in Sooke Basin Sediments when the very large bioassay database generated in that study did not find toxicity. Goyette and Brooks (1998, 2000) found that the arithmetic mean of the TEL and the Probable Effects Level (PEL) and/or the Washington State SQC were both protective and efficient. Other SQC are available, such as the Consensus SQC proposed by Swartz (1999) and these should have been reviewed by NOAA. The reports of Goyette and Brooks (1998, 2000) are particularly appropriate for consideration here because they apply to the mixture of PAH that accumulates in sediments in association with the use of creosote treated wood.
- 3. On page 17 regarding dissolved concentrations of PAH adjacent to creosote treated wood, it is stated that, "Water column concentrations were not measured at this time." This statement is disingenuous. Water column concentrations of dissolved PAH were measured at significant expense by the Battelle Marine Science Laboratory using semi-permeable membranes placed 15 cm from the piling. The concentrations were determined to be in the 20 nanogram/L range for the ∑PAH at the three piling stations which was not significantly different from concentrations found at the reference location. In addition, tissue concentrations

of PAH in mussels used in the *in-situ* bioassays were found to be only slightly elevated two weeks after construction and they were low and not elevated in either lipid rich gonadal tissue or in somatic tissue after that.

- 4. On page 21 it is stated that BMP levels should not exceed American Wood Protection Association (AWPA) minimums. There are no minimum/maximum retention values in the AWPA Standards. For example, in AWPA, UC5B states that in the assay zone for coastal Douglas-fir creosote retention is 16 pcf (pounds per cubic foot). That is the recommended creosote retention level. There is only one retention given in the standard.
- 5. And to suggest on page 25 that older material was not treated to BMPs but to refusal. This is not correct. Marine wood piling for aquatic use has always been treated to a specific "targeted retention level". Note the wood treating industry on the west coast has been producing BMP piles since the early 1990s.
- 6. Further to discuss this issue on page 25, NOAA suggests that, "Since older creosote treated wood materials were likely not produced in accordance with industry BMPs (i.e. they were likely treated to the point of refusal), they should not be reused in aquatic environments." In response, we are unaware of any documentation suggesting that prior to development of production BMPs, creosote treated piling were treated to refusal. In developing the creosote risk assessment model, Brooks (1997b) analyzed recorded creosote retention measured historically in nearly 2000 charges and determined an average retention of 22.4 pcf when 20 pcf was the target retention. The average retention is far less than treatment to refusal (in Douglas-fir, if treatment was to refusal, the creosote retention could approach 30 pcf). Secondly, BMPs are designed to produce products that are clean and free of surface deposits of preservative and to insure that the preservative is "fixed" when that is a factor (not so with creosote, only the waterbornes). BMP verification studies have shown that properly designed BMPs can be effective in significantly diminishing elevated loss rates observed shortly after immersion in non-BMP produced wood. Older piling, such as the eight year old piling used in the Weather Piling dolphin in the Sooke Basin Studies performed nearly as well as the BMP piling did. The point being that older piling removed from service have lost that first flush of preservative and should perform similar to BMP produced piling. However, piling removed from service should be carefully examined for integrity before being re-used.

The next two paragraphs focus on several general comments to the NOAA document. The document cites the Vines *et al.* (2000) study finding adverse effects on herring spawn associated with creosote treated wood, but failed to report that Goyette and Brooks (1998, 2000) found that spawn from mussels growing directly on the creosote treated piling developed normally to the trochophore stage. While it is true that fish (vertebrates) and invertebrates (with planktonic early life stages) face different contaminant pathways

comment a

and therefore different challenges, both reports should have been discussed – or neither report should have been included.

Of particular interest is NOAA's failure to report the abundance and diversity of invertebrates living on creosote treated piling by Brooks *et al.* (2006). The authors observed 64 different taxa in nine 200 cm<sup>2</sup> samples collected from the piling. These taxa included 12 mollusks, 13 arthropods and 26 annelid species. The fouling community was found to be exceptionally abundant, containing an average of 79,900 invertebrates/m<sup>2</sup>. The reason for NOAA's failure to report these findings is understandable, because the results do not support NOAAs assertion that pressure treated wood structures are toxic to aquatic life.

Citing the statements in the previous two paragraphs, Creosote Council does not believe it is asking too much to require a government agency to rigorously report all of the information available in an honest effort to understand how a product or activity affects biological resources. NOAA has cited, performed studies (i.e., Stratus Report), and made a significant effort to focus on the use of treated wood products in aquatic environments, yet has done nothing, at least that we are aware of that focuses on the use of other products, such as galvanized steel, concrete and plastic materials.

One further comment – it is very interesting that many citizens in Washington State have recognized the habitat value of creosote treated wood structures and are working vigorously to restrain the Department of Natural Resources from removing them. Not only do the citizens believe the creosote structures to have habitat value, they also deplore the high cost, at taxpayer expense, to remove these structures.

Creosote Council offers these as constructive comments in the spirit of developing useful guidelines for the continued use of creosote treated in aquatic environments.

Thank you for your consideration of these comments.

Respectfully submitted on behalf of the Creosote Council,

David A. Webb, Administrative Director



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March 16, 2009

National Marine Fisheries Service 777 Sonoma Avenue, Suite 325 Santa Rosa, CA 95409

Attn: Joe Dillon, Water Quality Coordinator

FAX: 707-578-3435

EMAIL: SWR.treatedwood@noaa.gov

RE: Comments by The Railway Tie Association on NOAA's Document "The Use of Pesticide-treated wood products in aquatic environments: Guidelines to NOAA Fisheries Staff for the Endangered Species Act and Essential Fish Habitat Consultations"

The Railway Tie Association represents 3000 members nationwide that produce and use creosote treated wood products in railroad applications. We would like to offer the following comments on the NOAA fisheries document named above specifically as it relates to creosote treated ties and other treated wood railroad products.

We support the effort to develop "a guidance document" that has been put forth by the treated wood industry – lead by the Western Wood Preserves Institute (WWPI). The continued aquatic use of treated wood products is extremely important to our nation's economy and transportation network anchored by 200,000+ miles of railroad track that crisscross the United States.

You have previously received comments from both WWPI and the Creosote Council that we are in agreement with. I will not rewrite all the specific points, but do need to highlight several key items.

First, we too strongly object to the use of the term "pesticide-treated wood" used in the title and throughout the document. The wood products that are referred to in the proposed guidelines are commonly referred to as preservative-treated wood. As far as we know we have never seen the term "pesticide-treated wood" used for these products outside this document. It is misleading and carries a negative connotation that belies its benign nature when used in accordance with EPA approved guidelines under FIFRA.

We also would like to restate and reinforce the Creosote Council comments where they object to the heavy reliance on the flawed Stratus Report, including their very specific multi-point critique. We also find this objectionable, because we do not believe that the Stratus Report fairly represents all of the science that has been conducted on creosote and thus, once again, projects a basis for negative bias against the use of creosote treated wood products in aquatic environments.

Most importantly, the proposed guidelines do not provide a clear process for biologist and/or project proponents to make consistent risk evaluations and decisions with respect to using crossote treated wood. Without a clear and concise process to follow, decision



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makers may very well approach the use of treated wood with the aforementioned negative connotations and bias. This lack of process guidance is likely to lead to confusion and misinterpretation, and negatively impact the appropriate use of creosote treated wood.

We strongly recommend that NOAA invest time into the development of further guidance that will provide a clear and distinct path for the evaluation of treated wood use that will harmonize the published conclusions of the current guidance document with industry guidelines, including BMPs, and allow all the science that exists for creosote treated wood to be referenced as part of that evaluation path.

The Railway Tie Association offers these comments in the spirit of constructive cooperation in the development of useful guidelines for the continued use of creosote treated wood in aquatic environments.

Thank you in advance for your consideration of these thoughts.

Respectfully submitted,

James C. Gauntt Executive Director



### Southern Pressure Treaters' Association

March 17, 2009

National Marine Fisheries Services 777 Sonoma Avenue, Suite 325 Santa Rosa, CA 95409 Attn: Joseph Dillon, Water Quality Coordinator

Re: Comments on Draft Guidelines for Use of Pesticide- Treated Wood Products

Dear Mr. Dillon,

The Southern Pressure Treater's Association (SPTA) is pleased to provide comments on the *Draft Guidelines for Use of Pesticide-Treated Wood Products*, in accordance with the Federal Register Notice of January 13, 2009. The SPTA is a non-profit trade association representing the industrial wood preservers in the eastern United States.

SPTA participated in the Western Wood Preservers Institute's Endangered Species Act Committee (The Committee) and agree with the committee's comments submitted to NOAA. Because of our experience in the wood preserving industry, SPTA is writing today to <a href="strongly recommend">strongly recommend</a> that NOAA adopt the Committee's recommendations on developing a field worksheet and decision tool for use by both agency personnel and project proponents. Our past experience has proven that this approach eliminates misunderstandings up front and causes a project to progress in a timely and non-biased manner. We believe this recommendation is imperative to making the guidelines a useful, fair and science based tool.

An additional benefit would be the money saved in labor and time by the participants due to having a standardized procedure to follow instead of re-inventing the process for each project. We see this as a "win win" for both the agency and the stakeholders.

We greatly appreciate the opportunity to provide comments on the *Draft Guidelines for Use of Pesticide-Treated Wood Products*. Congratulations to you and your team for writing the draft. We hope our constructive comments will be of assistance to you in completing the guidelines. We look forward to a science based, fair and appropriate guidelines for determining the use of preservative-treated wood in aquatic environments..

Sincerely,

Carl Johnson Executive Director Southern Pressure Treater's Association



7223 NE Hazel Dell Avenue, Suite B | Vancouver, WA 98665 | www.maulfoster.com

March 16, 2009 Project No. 0164.02.01

Mr. Joe Dillon National Marine Fisheries Service 777 Sonoma Avenue, Suite 325 Santa Rosa, CA 95409

Re: Comments on Public Review Draft - The Use of Pesticide-Treated Wood Products in Aquatic Environments, January 2009

Dear Mr. Dillon:

As a professional engineer involved in the permitting and design of facilities located in aquatic environments, I have the opportunity to work on a variety of projects requiring approval from a number of federal, state, and local agencies. In that capacity, I welcome NOAA Fisheries' efforts to prepare guidance for the agency's personnel that will allow the appropriate use of treated wood.

Although there are several references to research with which I don't fully concur, I would like to focus my comments on suggestions for developing a screening level checklist that will simplify both the permit application and agency review process for those projects that have little or no affect on waters subject to Endangered Species Act (ESA) or Essential Fish Habitat (EFH) consultations. In NOAA's Guidelines there are a number of references to various types of aquatic environment projects that could be acceptable uses for treated wood that could "pass a screening level examination and require relatively little assessment." Much of the information necessary to make these determinations is either discussed or referenced within the body of the NOAA's guidelines.

I strongly suggest that the inclusion of such a screening tool in the NOAA guidelines could be a significant help to project proponents and agency personnel alike. It would also help proponents to scope and preliminarily design more projects that would be able to pass this screening level test.

I have included with this letter an example decision tree to better explain how this approach could be employed by NOAA field personnel to perform a screening level examination and how the process relates to projects that may require a more detailed risk assessment to determine potential impacts of larger, more involved projects.

The decision tree lists a number of screening tools to aid in determining whether the project, as proposed, would be an acceptable use of treated wood. The tools would provide the information for agency personnel to reach an objective decision on the project's acceptability. The project proponents could also use the tools to scope and evaluate their projects before

submitting them for review and approval. I look at this as a win-win proposition since it makes everyone's job a little easier.

If the project is larger or more complex and does not fit within the parameters for the screening examination, then the project proponent can use the available models (WWPI or NMFS, 1998) to evaluate risk relative to known benchmarks. These models are mentioned in the NOAA guidelines as acceptable means for developing a more detailed risk assessment.

The evaluation worksheet could be added to the current NOAA guidelines worksheet as an appendix and referenced in the body of the document as the specific tool to be used for project evaluations. I believe this tool would assist both the project proponent and the reviewing agency in streamlining and standardizing the approval process.

Thank you for your time and efforts in putting together the guidelines.

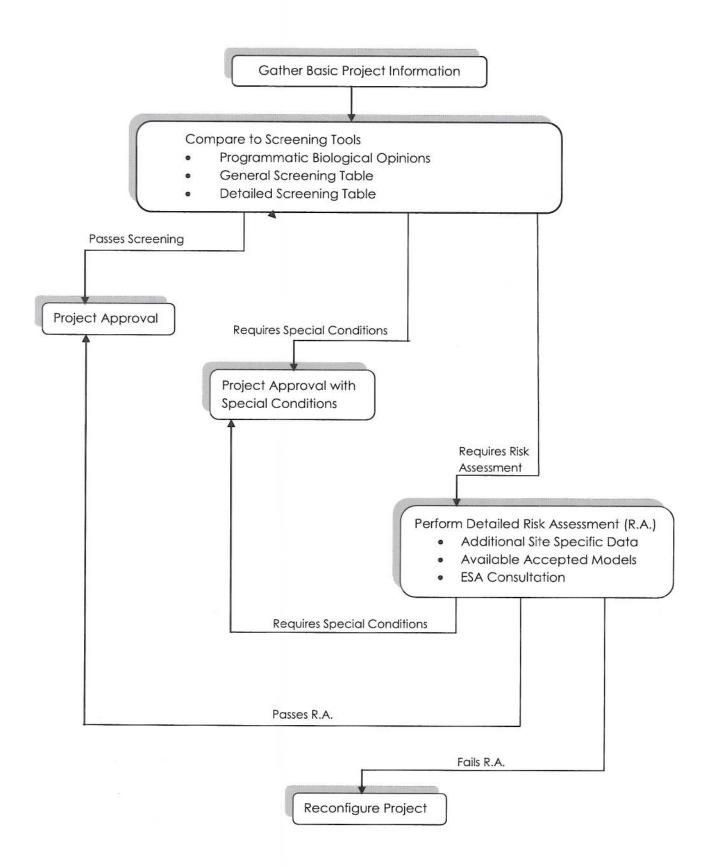
Mongi

Sincerely,

Maul Foster & Alongi, Inc.

Neil R. Alongi Vice President

Attachments: Decision Tree





7017 N.E. Highway 99, Suite 108 Vancouver, WA 98665 360/693-9958 Fax 360/693-9967 E-Mail: info@wwpinstitute.org

March 16, 2009

National Marine Fisheries Service 777 Sonoma Avenue, Suite 325 Santa Rosa, CA 95409 Attn: Joseph Dillon, Water Quality Coordinator

Re: Treated Wood Comments

Dear Mr. Dillon,

The Western Wood Preservers Institute's Endangered Species Act (ESA) Committee is pleased to have the opportunity to provide comments on the Draft Guidelines for Use of Pesticide-Treated Wood Products, in accordance with the Federal Register Notice of January 13, 2009. We understand the chief concern National Marine Fisheries Service (NMFS) has about the use of treated wood in aquatic environments is the effects of wood preservatives on salmonids, which are managed under the ESA, and the Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), as well as the need for guidance to assist biologists for the NMFS to better understand the issues relating to the use of preservative-treated wood in aquatic environments in order to make consistent effect determinations for projects proposing to use treated wood products.

The following comments represent the consolidated viewpoints and concerns regarding the draft guidelines from the Western Wood Preservers Institute (WWPI). The comments also reflect collective input from our national ad hoc working committee, which includes the major preservative producers, wood preserving companies, and industry organizations, including WWPI, The Southern Pressure Treaters' Association, The Timber Piling Council, Treated Wood Council, The Creosote Council III, Penta Task Force and The Railway Tie Association. While the comments represent a consensus viewpoint of the participating companies and organizations, they do not necessarily imply the full concurrence of all the participants, and separate comments may be submitted on behalf of individual entities as they may deem appropriate.

After over a decade of unresolved debate on the appropriate use of treated wood in aquatic environments, WWPI is very pleased to see the release of the Draft Guidelines. The development of treated wood guidelines has been an ongoing matter of concern for the public and government agency users and producers of treated wood products on the west coast and nationally. WWPI has always believed such guidance would be an important environmental tool and, when appropriately applied, can remove the uncertainty about the use of treated wood in certain aquatic environments. The treated wood industry has also consistently been

committed to the position that it would accept and support responsible science-based guidelines and policy.

WWPI appreciates NMFS SW Region's efforts in developing the draft guidelines and their willingness to consider scientific data and input from the industry during the review and development process. WWPI believes the issuance of the draft guidelines is a significant step forward in establishing a basis for reaching mutually acceptable guidelines, and though it does not resolve all our differences on the science, it does significantly bring the stakeholders closer to agreement on the parameters for conducting project assessments. We are also pleased that the guidelines accept the use of treated wood under certain circumstances, strongly embrace the use of the BMPs, and recognize the value of industry risk assessment models that were developed by Dr. Kenneth M. Brooks.

WWPI would like to offer the following comments that highlight our recommendation for developing a process to evaluate treated wood proposed for use in aquatic applications; a review of the science; and statements we believe are in error.

#### **GUIDELINE RECOMMENDATIONS**

#### **Need For Evaluation Worksheet and Procedures**

Over the past decade or longer, the wood preservative industry has frequently observed that the biggest barrier to the use of treated wood in aquatic environments is not the adverse environmental effects of treated wood but rather the uncertainty on the part of regulators and project proponents as to the possibility of such potential effects, and the resulting delay in processing project permits and applications that call for the use of treated wood in aquatic environments. These often-substantial delays due to uncertainty have had the practical effect of putting treated wood at a disadvantage in the marketplace in comparison to competitive products. Some project proponents find it easier to simply avoid use of treated wood in order to expedite the regulatory approval process, regardless of the relative environmental effects of treated wood and its competitors.

The NMFS Guidance document is the best and most concise effort to date to bring together the best available science on all the various factors and tools needed for evaluating and mitigating the environmental aspects of using of treated wood in aquatic applications. However, we believe it still falls short of providing sufficiently clear guidance to the regulator or project proponent that is needed to make an evaluation and issue decisions in an efficient and consistent manner. The next logical step is developing a worksheet decision tool (referred to in the NMFS Guide document as a screening level examination) for use in the field. Please see the comments of Robert Alverts, a former Department of Interior employee, who gives a case study in support of the need for such a screening tool (Attachment 2). As noted in the draft NMFS Guide there are many cases where a determination that treated wood can be used could be a simple decision, where as other cases require a more detailed evaluation with potential limitations or mitigation actions.

Field biologists are of necessity generalists who must deal with a vast array of issues on each project reviewed and cannot be expected to fully understand the various complexities of treated wood. Similarly project proponents are also not experts in treated wood, and need tools to help evaluate the appropriateness of using treated wood before submitting a project application.

The industry feels strongly that NMFS's work to date on draft guidelines have created the tools to shorten and simplify the review process by setting the stage for the development of a screening level worksheet. Such an approach would allow all parties to determine which types of treated wood are environmentally acceptable in specific cases to meet the ESA and EFH criteria, and where further review or actions are needed. The industry is requesting that NMFS initiate action to harmonize the existing guidance (such as SLOPES III), the guidance in the NMFS Guide and the Industry Guidance and Models into a screening level work sheet and evaluation procedure. The industry recognizes that this additional work may be a burden on NMFS staff and budget and, if requested, would be more than willing to provide any needed assistance.

Conceptually, we envision such a document would contain several key sections:

- A. An explanation of how the worksheet should be used for ESA and EFH determinations, and to which preservative systems and project types it applies.
- B. A standard condition for all projects dictating that the provisions of the Best Management Practices be required including the production, installation, certification and management of treated wood.
- C. The basic project description information and specifics of treated wood to be used.
- D. Identification of the Basic Environmental Parameters and related regulatory authorities that impact the use of treated wood. This could include documentation on the species of concern, fresh or aquatic application, water flow and quality data, sediment conditions, presence of other treated structures and other regulatory provisions in the area.
- E. Level One Screening Examination Depending upon the preservative system, items in C and D above might require supplementation with information on some additional variables. The user would then be provided with risk evaluation decision tools or tables combining the variables, which would determine if the project is: a) acceptable without further review; b) acceptable with special conditions; or c) requires a Level Two Risk Evaluation to determine if treated wood is appropriate.
- F. Level Two Detailed Risk Evaluation. This section would provide guidance for conducting the detailed evaluation. This would include guidance for additional environmental parameter data needed; selecting the appropriate model; using the model; evaluating the model outputs; determination of project is acceptability; and/or what additional actions are dictated.

The use of this screening examination worksheet approach should facilitate prompt and accurate identification of proposed project uses of treated wood that do not raise significant environmental concerns and can proceed without further review or delay. For example, the worksheet could provide the basis for a prompt concurrence with an action agency "not likely to adversely affect" determination, terminating ESA/EFH consultation without additional formal review.

As stated previously, while development of a worksheet and guidance document may not resolve all areas of scientific disagreement, it should identify the specific contested issues that are critical to the process, and afford an opportunity to develop an acceptable resolution of concerns. It may also reveal that some areas of scientific disagreement are not in fact critical and do not constitute a barrier to a prompt and accurate review process.

Currently there is an effort underway to write and publish a peer reviewed book that captures the wealth of existing science on managing preservative treated wood in aquatic environments. Dr. Jeff Morrell of Oregon State University – Wood Science and Engineering is the managing editor of the project. In preparing the chapter on "Modeling the Environmental Risks Associated with Pressure Treated Wood Used in Sensitive Environments", Dr. Kenneth Brooks has expanded and diversified the Timber Bridge Model (Brooks 2005a) to include all eleven currently used types of wood preservatives, including creosote, pentachlorophenol, copper naphthenate, ACZA, CCA-C, CA-B<sup>TM</sup>. Wolman AG<sup>TM</sup>, ACQ-B or C<sup>TM</sup>, Wolman μCu Azole<sup>TM</sup>, MicroPro Azole<sup>TM</sup>, and MicroPro Quat<sup>TM</sup>. The chapter and the model are being peer-reviewed as part of the publication process. Because of the expanded capability of the updated model to evaluate overhead and immersed structures in aquatic environments, the industry recommends the completed model be recognized as a viable modeling tool, as well as including evaluation parameters for all the above mentioned preservatives in any developed screening examination worksheet.

The successful development of such a worksheet would be a great benefit to all participants. It would facilitate efficient and responsible decisions by the regulatory community. It would help proponents bring forth projects which are most likely to be accepted. It would make the responsible use of treated wood more easily available to the market where the structural and economic characteristics are needed.

#### THE SCIENCE

1. Page 8. In general, the toxicity of dissolved copper is not a great concern. Rather it is the toxicity of cupric ion (Cu2+) that is of greatest concern. Dissolved copper includes copper adsorbed to inorganic and organic molecules that have reduced bioavailability but that pass a 0.45 μM filter. Although we have not yet had the opportunity to obtain and read Hecht et al. (2007), we suspect that the responses referenced are associated with increases in cupric ion concentrations rather than dissolved copper. These are the reasons that EPA uses hardness (mg CaCO3/L) based water quality criteria for most divalent metals. NMFS has previously agreed to use the EPA WQC, which industry continues to support as a standard.

- 2. Page 8. Hecht et al.'s (2007) definition of background copper as having a maximum of 3 µg dissolved Cu/L is not consistent with USGS data showing background concentrations of 15 to 25 µg dissolved Cu/L in relatively pristine rivers like the Copper River in Alaska, which supports one of the most famous salmon runs in North America.
- 3. Page 8. While we have inferred that dCu refers to dissolved copper, we recommend inclusion of a proper definition of this acronym in the text.

Leachate from pressure treated wood contains high concentrations of dissolved organic wood extractives which likely bind the copper reducing its bioavailability. Though we have no data to substantiate a hypothesis, we suspect that the leachate from wood preserved with copper containing preservatives contains little or no cupric ion. NMFS has not identified any evidence substantiating its inference that the leachate from pressure treated wood has any effect on salmonid olfaction. The point of this discussion is that from a technical point of view, the draft guidelines are not clear with respect to what form of copper results in compromise of olfactory responses and for how long the effect lasts. If we are, in fact, talking about concentrations of the cupric ion, then the HydroQual's Biotic Ligand Model (BLM) provides a means of speciating dissolved copper and of defining appropriate WQC. However, to be used accurately, that model requires analysis of numerous organic and inorganic constituents in water – some of which are Resolving this issue is important because the natural variability in background dissolved copper may exceed 0.79 µg/L, resulting in a denial of the use of copper based wood preservatives in or over water in the Western United States. NMFS has previously agreed to use EPA's hardness-based WQCs, which are nationally accepted criteria, for assessing treated wood projects.

- 4. Page 12. When citing the Vines et al. (2000) study, which found adverse effects on herring spawn associated with creosote treated wood, the report omits reference to Goyette and Brooks (1998, 2000), which found that spawn from mussels growing directly on the creosote treated piling developed normally to the trochophore stage. While it is true that fish (vertebrates) and invertebrates (with planktonic early life stages) face different contaminant pathways and therefore different challenges, we recommend that either (1) both reports should be discussed or (2) neither report should be included. We are aware that there are some concerns being raised about the protocols used in the Vines et al. study.
- 5. Page 13. We believe the Threshold Effects Level (TEL) and Effects Range Low (ER-L) are not appropriate sediment quality benchmarks. Washington State has published EPA-approved marine Sediment Quality Criteria (SQC) in WAC 173-204 and is currently developing freshwater Sediment Quality Values (WDOE 2002, 2003). Goyette and Brooks (1998, 2000) conducted a detailed assessment of the efficiency and protectiveness of a range of possible SQC applicable to the Sooke Basin Study. Similar to WDOE (2002, 2003) they found that the TEL and ER-L were unacceptably inefficient because they predicted far too many toxic effects in Sooke Basin Sediments when the very large bioassay database generated in that study did not find toxicity. Goyette and Brooks (1998, 2000) found that the arithmetic mean of the TEL and the Probable Effects Level (PEL) and/or the Washington State SQC were both protective and efficient. Other SQC are available, such as the Consensus SQC proposed by Swartz (1999) and we

Comment

recommend that NMFS should review these standards and consider them for inclusion in the guidelines. The reports of Goyette and Brooks (1998, 2000) are particularly appropriate for consideration here because they apply to the mixture of PAH that accumulates in sediments in association with the use of creosote treated wood.

- 6. Page 17. Regarding dissolved concentrations of PAH adjacent to creosote treated wood projects it states that, "Water column concentrations were not measured at this time." Water column concentrations of dissolved PAH were measured at significant expense by the Battelle Marine Science Laboratory using semi-permeable membranes placed 15 cm from the piling. The concentrations were determined to be in the 20 nanogram/L range for the  $\Sigma$  PAH at the three piling stations which was not significantly different from concentrations found at the reference location. In addition, tissue concentrations of PAH in mussels used in the in-situ bioassays were found to be only slightly elevated two weeks after construction and they were low and not elevated in either lipid rich gonadal tissue or in somatic tissue after that.
- 7. Page 19. It is asserted that, "Replicate samples were not taken, with the exception of artificial substrates that allowed for expeditious sampling." In our opinion this is a significant misperception of the sampling design, which included triplicate sediment (infaunal) samples collected within 0.5 meters of each of the viewing platforms' perimeters on each of the four sampling days. Two levels of control were established in this study. An upstream station provided one level of control and a Mechanical Control Structure, where an additional full suite of 28 macrofaunal samples was collected on each sampling day, provided the second level of control. In total, 192 artificial substrate samples, 192 infaunal samples and 64 vegetation samples were collected during the four sampling events at Wildwood. That is a total of 448 macrofaunal samples collected and analyzed during the eleven month study. Sediments were examined to evaluate infauna and epifauna, artificial substrates were examined to assess the drift community and vegetation samples were examined to assess the invertebrate community in that compartment. This lack of acknowledgement may be due to a misperception of the power of the regression approach taken in this study. We believe a closer review of the study design would show that triplicate samples were available from the perimeter of each viewing platform and from the perimeter of the Mechanical Control treatment on each of the sampling days – allowing for conventional t-tests or analysis of variance.
- 8. We recommend that NMFS include a discussion of the results of the many macrofaunal studies undertaken in an effort to understand the biological response to the use of pressure treated wood. The results of all of these studies demonstrate no decrease in the abundance or diversity of invertebrates living on or in the immediate vicinity of pressure treated wood structures. The fact is that all of these results from numerous studies demonstrated an increase in the abundance and diversity of invertebrates living on or in close proximity to treated wood structures.

We recommend that NMFS include a discussion of the abundance and diversity of invertebrates living on creosote treated piling presented in Brooks et al. (2006). The authors observed 64 different taxa in nine 200 cm2 samples collected from the piling. These taxa included 12 mollusks, 13 arthropods and 26 annelid species. The fouling community was found to be exceptionally abundant, containing an average of 79,900

invertebrates/m2. We believe all the information should be rigorously reported in order to gain a better understanding of how a product or activity affects biological resources. In contrast, many citizens in Washington State have recognized the habitat value of creosote treated wood structures and are working vigorously to restrain the Department of Natural Resources from removing them.

#### **GENERAL COMMENTS**

- Page 3. In the first paragraph of "Introduction", components of wood preservatives are
  referred to as "contaminants". We object to the use of the word "contaminants" as
  these products are EPA registered chemicals approved for use as a wood preservative
  system and are not considered "contaminants" under the registration. We request the
  uniform use of a neutral term.
- 2. Page 7. In the second sentence under "Copper Toxicity in the Water Column", there is an error in identifying the components of ACZA, it does not include Chromium.
- 3. Page 21. In regards to the BMPs, it states "At the basic level, this means that the pesticide-treated wood product contains no more than the minimum level of pesticide necessary, as specified by the American Wood Preserver's Association (now called the American Wood Protection Association) retention standards." While this is the stated requirement of the BMPs, in a practical sense, one needs to recognize that it is not feasible to consistently meet the minimum standards precisely to the number due to any number of variables, such as type of wood species, age of wood, moisture content, preservative used, and treatment processes. The intent of treating to the BMPs is to use the minimal amount of preservative that complies with the AWPA standards in order to produce a clean and dry product suitable for use in aquatic environment certified by a third party inspection agency. In simple terms, recommending that the maximum level of preservatives is no more than the minimum necessary to meet industry standards is an impossible criterion.
- 4. Page 25. It is suggested that, "Since older creosote treated wood materials were likely not produced in accordance with industry BMPs (i.e. they were likely treated to the point of refusal), they should not be reused in aquatic environments." In response, we are unaware of any documentation suggesting that prior to development of production BMPs, creosote treated piling were treated to refusal. In developing the creosote risk assessment model, Brooks (1997b) analyzed recorded creosote retention measured historically in nearly 2000 charges and determined an average retention of 22.4 pcf when 20 pcf was the target retention. The average retention is far less than treatment to refusal. Second, BMPs are designed to produce products that are clean and free of surface deposits of preservative and to insure that the preservative is "fixed" when that is a factor. BMP verification studies have shown that properly designed BMPs can be effective in significantly diminishing elevated loss rates observed shortly after immersion in non-BMP produced wood. Older piling, such as the eight year old piling used in the Weather Piling dolphin in the Sooke Basin Studies, performed nearly as well

as the BMP piling. The evidence is that older pilings removed from service have lost the initial flush of preservative and should perform similar to BMP produced piling.

5. In the title page and throughout the document there are numerous uses of the term "pesticide-treated wood", "pesticide-treated industry" or "pesticide-treated wood products". We strongly believe this choice of terminology should be abandoned in favor of a neutral term, as it is not the commonly accepted or used terminology in the marketplace or by the industry. The term is misleading because it erroneously implies wood treated with a FIFRA-registered wood preservative acts like a pesticide (i.e., controls or repels fungi, insects or other pests). To the contrary, wood is treated with a FIFRA-registered wood preservative in order to protect wood from degradation and is specifically exempt from FIFRA regulation as a pesticide under EPA's treated articles exemption. See 40 C.F.R. 152.25(a). We would recommend the terminology be changed to read "preservative-treated wood".

We greatly appreciate the opportunity to provide comment on the *Draft Guidelines for Use of Pesticide-Treated Wood Products*. Our comments are intended to further achieve what we believe is a common goal of developing guidelines that are science based, fair and appropriate for determining the use of preservative-treated wood in aquatic environments.

Sincerely,

Led La Doux

Ted J. LaDoux Executive Director

Attachments (2)

#### ATTACHMENT 1

#### Science References

- Brooks. K.M. 1997a. Literature Review and Assessment of the Environmental Risks Associated with the Use of ACZA Treated Wood Products in Aquatic Environments. Second Edition. Prepared for the Western Wood Preservers' Institute 7017 NE Highway 99, Suite 108, Vancouver, WA 98665. 98 pp.
- Brooks, K.M. 1997b. Literature Review, Computer Model and Assessment of the Potential Environmental Risks Associated With Creosote Treated Wood Products Used in Aquatic Environments. Published by the Western Wood Preservers Institute, 601 Main Street, Suite 401, Vancouver, WA 98660. 137 pp.
- Brooks, K.M. 2000a. Environmental effects associated with the use of CCA-C, ACZA and ACQ-B pressure treated wood used to construct boardwalks in wetland areas. U.S. Department of Agriculture Forest Products Laboratory, Research Paper FPL-RP-582. 126 pp. plus appendices.
- Brooks, K.M. 2000b. Assessment of the environmental effects associated with wooden bridges preserved with creosote, pentachlorophenol or chromated-copper-arsenate (CCA-C). U.S. Department of Agriculture Res. Pap. FPL-RP-587. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory, 100 pp.
- Brooks, K.M., D. Goyette and S. Christie. 2006. Sooke Basin Creosote Evaluation Results of the October 2005 Reconnaissance Survey. Creosote Evaluation Committee, Fisheries and Oceans Canada, Pacific Yukon Region, 201-401 Burrard Street, Vancouver, British Columbia, Canada V6C 3S5. 150 pp.
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- Goyette, D. and K.M. Brooks. 2000. Addendum Report Continuation of the Sooke Basin Creosote Evaluation Study (Goyette and Brooks, 1998). Year 4 Days 1360 and 1540. Published by Environment Canada. 224 West Esplanade, North Vancouver, British Columbia, Canada V7M 3H7. 51 pp.
- Swartz, R.C. 1999. Consensus Sediment Quality Guidelines for Polycyclic Aromatic Hydrocarbon Mixtures. Environmental Toxicology and Chemistry, Vol. 18, No. 4. Pp. 780 787.
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- WDOE, 2002. Development of Freshwater Sediment Quality Values for Use in Washington State. Phasse 1 Task 6: Final Report. Washington Department of Ecology Publication Number 02-09-050. 65 pp. plus appendices.
- WDOE, 2003. Development of Freshwater Sediment Quality Values for Use in Washington State Phase II Report: Development and Recommendation of SQV for Freshwater Sediments in Washington State. Washington Department of Ecology Publication Number 03-09-088.

#### **ATTACHMENT 2**

14569 SW 130<sup>th</sup> Ave. Tigard, OR 97224 March 13, 2009

National Marine Fisheries Service ATTN.: Joseph Dillon, Water Quality Coordinator 777 Sonoma Ave., Suite 325 Santa Rosa, CA 95409

Dear Mr. Dillon:

I am pleased to share comments with you concerning the *Draft Guidelines for Use of Pesticide-Treated Wood Products* as identified in the Federal Register Notice of January 13, 2009. I am currently a natural resources consultant, periodically assisting the Western Wood Preservers Institute (WWPI). WWPI asked me to review your document and prepare comments based on my extensive experience with the federal government.

You are to be commended for the extensive work that went into development of the guidelines intended for use by your staff and constituent interests when considering the use of treated wood. The stated purposes of the guidelines are to: 1) assist NMFS biologists understand the issues related to marine use of pesticide-treated wood and make consistent effect determinations for projects proposing to use these products, 2) outline Best Management Practices (BMPs) for projects, and 3) be used in conjunction with site-specific evaluations of other potential impacts.

Now retired, I am a forty year veteran of the US Department of the Interior, where I worked as a natural resource manager, research and monitoring coordinator, and regional science advisor. During the mid-1990s I was actively involved with implementing the Northwest Forest Plan (NFP) and serving as a member of the Regional Ecosystem Office's Research and Monitoring Committee. As a result of that experience, I see several parallels with the Northwest Forest Plan and the intent of your proposed guidelines, and some areas where I believe your guidelines need to be strengthened.

Much like your effort, the Northwest Forest Plan also included an extensive set of standards and guidelines to be used by all the management, research and regulatory agencies involved with plan implementation. While these guidelines were valuable, they were incomplete and lacked specific detail and methods needed for management agencies to consistently meet plan

goals while implementing proposed actions. As a consequence, the Interagency Advisory Committee agreed to review them and form a number of interagency-intergovernmental subcommittees to develop more detailed guidance methods and tools for NFP implementation.

These sub-committees did an excellent job, working together to develop useful tools that could be consistently applied. While taking some time initially, they helped improve agency collaboration and cooperation, increased efficiencies, and saved money and time for all involved.

After reviewing your draft document, I see the need to develop comparable additional details and tools that I believe will better assist your biologists, as well as proponents of treated wood make consistent application of your intended goals. I strongly urge you to help lead and coordinate such an effort. I believe you will find the experience invaluable for your agency and all involved stakeholder interests. And I believe it would help cut costs, workload and staff time in the long run.

I appreciate the opportunity to share some thoughts with you and look forward to seeing the successful implementation of your final guidelines.

Sincerely,

Robert L. Alverts
Science and Management Consulting



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT Oregon State Office P.O. Box 2965 Portland, Oregon 97208

IN REPLY REFER TO: 6840 (OR-931)

MAR 1 7 2009

Mr. Joseph J. Dillon National Marine Fisheries Service Attn: Water Quality Coordinator/Treated Wood Comments 777 Sonoma Avenue, Suite 325 Santa Rosa, CA 955409

Dear Mr. Dillon:

The Oregon State Office of the Bureau of Land Management is providing comments on the public review draft document, "The Use of Pesticide-Treated Wood Products in Aquatic Environments: Guidelines to NOAA Fisheries Staff for the Endangered Species Act and Essential Fish Habitat Consultations." The comments are in response to a notice of availability published in the *Federal Register* on January 13, 2009 (Volume 74, No. 8, pages 1663-1664, RIN 0648-XM60). Comments are located in the enclosed document. Based upon the information provided in the draft document, we believe there is an opportunity to develop an Endangered Species Act effects determination tool for Section 7 consultations on actions that involve the use of pesticide-treated wood. We would be pleased to explore this concept further with you. Please refer questions regarding the comments to Joseph K. Moreau, Lead Fish Biologist, at 503-808-6418.

Sincerely,

Mark E. Johnson

Mark E. Joh

Acting Deputy State Director for Resource Planning, Use & Protection Oregon/Washington

#### Enclosure

cc: OR-931 (Mike Haske, Barb Hill) OR-932 ((Miles Brown, Chris Knopf, Cathy Bailey) WO-230 (Dwight Fielder, Tom Mendenhall) USDA Forest Service Region 6 (Scott Woltering) **Enclosure**: Oregon State Office Bureau of Land Management comments on the public review draft document, "The Use of Pesticide-Treated Wood Products in Aquatic Environments: Guidelines to NOAA Fisheries Staff for the Endangered Species Act and Essential Fish Habitat Consultations."

#### Introduction

Thank you for the opportunity to comment on the public review draft document, "The Use of Pesticide-Treated Wood Products in Aquatic Environments: Guidelines to NOAA Fisheries Staff for the Endangered Species Act and Essential Fish Habitat Consultations." The document provides a summary of the current state-of-the science regarding the effects of wood treated with copper compounds or creosote to aquatic habitats and fish species, with a particular emphasis on salmonid fishes. It also describes best management practices (BMPs) to minimize the effects.

The guidance document has a two-fold purpose statement. It will assist biologists for the National Marine Fisheries Service (NMFS) to: 1) Understand the issues relating to marine uses of pesticide-treated wood and, 2) make consistent effect determinations for projects. The document also discusses issues related to use of pesticide-treated wood in freshwater environments. The Oregon State Office of the Bureau of Land Management (BLM) believes the document can be strengthened to meet the purpose. It can also provide Federal action agencies information to assist us in designing actions to minimize effects to Endangered Species Act (ESA) listed species, designated critical habitat, and tools to perform analyses to support the effect determinations in our biological assessments. To these ends, we provide the following comments.

Document Should Discuss Treated Wood Products Presently Available for Wider Use

The guidance document focuses its attention on two copper chemicals: chromated copper arsenate (CCA) and ammoniacal copper zinc arsenate (ACZA). While these are the chemicals for which most of the research on effects to aquatic systems has been focused, the chemicals are no longer in wide use. As of January 1, 2004 the Environmental Protection Agency no longer allows the use of CCA in most situations, with the exception of marine use. The AZCA also has limited availability. Products containing arsenic are typically not allowed in structures where public contact with the treated wood is likely. Alkaline copper quaternary (ACQ) and copper napthenate (CN) are now widely available at retail outlets. The document does not address if the data on leach rates, modeling and field studies for CCA and AZCA are applicable to these more widely available products.

Document Should More Clearly State Levels of Toxics Constituting ESA Adverse Effects

The document does an excellent job of meeting the first purpose, which is to assist biologists in understanding the issues relating to aquatic uses of pesticide-treated wood. Key concerns regarding potential effects to ESA-listed fish and their habitats are described. A number of studies and modeling efforts, as well as the results of past ESA consultations for various uses of pesticide-treated wood are presented.

However, the document does not pull all of this information together in a manner to best meet the second purpose, which is to facilitate consistent ESA effect determinations. One problem is the lack of certainty regarding environmental impacts and ESA effects. There are many

locations in the document where terms such as "may, if, when, could, sufficient scope, etc." are used to describe effects. These are subjective terms that lead to different interpretations and have frequently led to disagreements when discussing the ESA effects of a variety of BLM actions in the past, including the use of chemicals in aquatic and riparian environments. If the science is prepared to answer the cause/effect questions thoroughly, then it is appropriate to issue clear guidelines on the topic without using subjective terms. If that is not possible, perhaps the general direction provided in this document should not be referred to as "guidelines" or "best management practices."

The section titled "Linkage of Toxicity, Modeling, Field Studies and Expected Impacts" on pages 19-21 summarizes the results presented earlier in the document on those topics. However, the synthesis of those results would have more utility for ESA Section 7 practitioners if it was in the form of a table or key that displayed triggers or circumstances that would lead to a "Not Likely to Adversely Affect" (NLAA) determination or a "Likely to Adversely Affect" (LAA) determination. Such a tool would better meet the purpose stated at the beginning of the document "to make consistent effect determinations" than the current text in this section.

For example, a threshold level of greater than or equal to 0.79 micro-grams per liter of dissolved copper ion in solution above background is described as affecting salmonid olfaction ability, which then can impair predator-avoidance behavior. If modeling predicts the action will result in an increase less than that, it could move the action towards a NLAA determination (provided other aspects of the action also are determined to be NLAA). A partial list of other criteria that could be used to sort projects for increasing risk of an ESA adverse effect, based upon case histories and studies described in the paper, include: spacing and number of pilings, velocity of current, exposed surface area, and background concentrations of copper.

The document makes several references to situations where the use of treated wood is not likely to cause adverse effects. For example, on page 30: "For a waterbody with sufficient dilution, the studies indicate that this should not be problematic and the potential impacts to salmonids are not likely to be meaningfully measured, detected or evaluated." The document then cautions about using treated wood in sensitive environments, such as those that provide habitat for ESA-listed fish. The document should clarify that the use of treated wood over freshwater streams with ESA-listed salmonids could still have effects that are not likely to be meaningfully measured, detected or evaluated if sufficient dilution is present. Experience with past consultations has shown that the use of treated wood over streams with listed salmonids is likely to result in an adverse effect determination by the NMFS simply because the fish are present.

### The NMFS Should Endorse Specific Models

To avoid situations where NMFS and the action agency cannot agree on the validity of models used to predict concentrations of leached chemicals (this has happened on several Oregon BLM consultations regarding use of chemicals), NMFS should state explicitly which models it endorses of those described in the document. Then it will be a matter of agreeing upon the specific numerics and assumptions used to input into the model, rather than the model itself.

#### Best Management Practices (BMPs)

This document contains several excellent examples of project design features that could help reduce the risk of aquatic impacts from pesticide-treated wood. Therefore, action agencies should be encouraged to utilize these measures.

However, there are several examples where BMPs are proposed but the information provided in the document is equivocal. For example, in the Over-water Coatings BMPs, the document states that over-water wood should be protected from the weather by an application of water repellant sealer. It then states on page 26 that "the biologist will have to determine if the waterbody into which the contaminants are leached is sensitive enough to require that a water-proof seal or barrier must be maintained for the life of the project." This step should be done first to determine if the BMP is initially needed.

Other points in the document that both support and refute the above BMP:

- In well mixed areas, dilution is often sufficient to decrease the concentration of CCA or ACZA to inconsequential levels.
- Similar to in-water structures of pesticide-treated wood, (over-water) infrastructure where significant dilution will occur will have sporadic inputs of contaminants that are less likely to have impacts that are measureable, detectable, or that can be meaningfully evaluated.
- The most important factor in the model's predictions is the current velocity. If significant water exchange is available to dilute the leached contaminants, then they are not predicted to increase contamination to a problematic level.

Therefore, there is information that indicates that use of pesticide-treated wood over flowing streams (the likely majority of BLM actions using this wood) may not be a significant issue. However, there is no specific information provided that would help a biologist determine when the receiving stream would be considered "sensitive." Based upon past experience, the lack of scientifically conclusive information will lead to numerous and often inconclusive negotiations between the NMFS and BLM biologists. Neither agency can afford to continue with this type of procedural inefficiency.

#### **Timing of Installation**

Page 23 includes a paragraph on timing of installation for projects. This section is vague and uses highly subjective terms (e.g., if a project is of sufficient scope, timing windows may be useful, may release contaminants at problematic levels). What is sufficient scope? When would timing windows be useful? When do contaminants become problematic? As a result of this ambiguity, there is no real guidance to be found here other than to consider the use of a timing restriction. This section may ultimately confuse the issue of project timing.