## Title 40---Protection of Environment CHAPTER I---ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER N-EFFLUENT GUIDELINES AND STANDARDS

# [FRL 654-5]

# PART 429—TIMBER PRODUCTS PROCESSING POINT SOURCE CATEGORY

# Pretreatment Standards for Existing Sources; Interim Final Rulemaking

Pretreatment standards for existing sources set forth in interim final form below are hereby promulgated by the Environmental Protection Agency (EPA or Agency). On April 18, 1974; EPA promulgated a regulation adding Part 429 Title 40 to the Code of Federal Regulations (39 13942). That regulation with subsequent amendments established effluent limitations and guidelines for existing sources and standards of performance and pretreatment standards for new sources for the timber products processing point source category. Pretreatment standards for existing sources in the timber products processing point source category were proposed April 18, 1974 (39 FR 13952), January 16, 1975 (40 FR 2834) and June 2, 1975 (40 FR 23829). The regulations established here for the following subcategories have been modified from the form in which they were proposed. The regulation set forth below will amend 40 CFR Part 429-timber products processing point source cate-gory by adding § 429.14 to the barking subcategory (Subpart A), § 429.24 to the veneer subcategory (Subpart B), § 429.34 to the plywood subcategory (Subpart C), § 429.44 to the hardboard-dry process subcategory (Subpart D), § 429.54 to the hardboard-wet process subcategory (Subpart E), § 429.64 to the wood pre-serving subcategory (Subpart F), § 429.-74 to the wood preserving-steam subcategory (Subpart G), § 429.84 to the wood preserving-boultonizing subcate-gory (Subpart H), § 429.94 to the wet storage subcategory (Subpart I), § 429.-104 to the log washing subcategory (Sub-part J), § 429.114 to the sawmills and planing mills subcategory (Subpart K), planing mins subcategory (Subpart E),
§ 429.124 to the finishing subcategory
(Subpart L),
§ 429.134 to the particle-board subcategory (Subpart M),
§ 429.174 to the wood furniture and fixture production without water wash spray,
booth (s) or laundry facilities subcategory (Subpart Q), and § 429.184 to the wood furniture and fixture production with water wash spray booths or with laundry facilities subcategory (Subpart R), pursuant to section 307(b) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, 1316(b) and 1317(b) and (c), 1251, 1317(b), 86 Stat. 816 et seq.; Pub. L. 92-500) (the Act). Except for the subcategories applicable to the wood preserving segment of the industry, which have limitations for spe-cific pollutants, the subcategories listed above are limited only by the general provisions of this regulation.

#### (a) LEGAL AUTHORITY

Section 307(b) of the Act requires the establishment of pretreatment standards

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for pollutants introduced into publicly owned treatment works and 40 CFR 128 establishes that the Agency will propose specific pretreatment standards at the time effluent limitations are established for point source dischargers. Sections 429.14, 429.24, 429.34, 429.44, 429.54, 429.-64, 429.74, 429.84, 429.94, 429.104, 429.114, 429.124, 429.134, 429.174, and 429.184 set forth below establish pretreatment standards for existing sources within the affected subparts of the timber products processing point source category.

#### (b) SUMMARY AND BASIS OF PRETREATMENT STANDARDS FOR EXISTING SOURCES

The regulation set forth below establishes pretreatment standards for pollutants introduced to publicly owned treatment works from existing sources within the subparts set forth in paragraph (a) above. This regulation is intended to implement the concepts of the general regulation for pretreatment standards for existing sources set forth in 40 CFR Part 128. This general regulation was proposed July 19, 1973 (38 FR 19236), and published in final form on November 8, 1973 (38 FR 30982).

The general pretreatment standard divides pollutants into two broad categorles: "compatible" and "incompatible." Compatible pollutants are generally not limited by specific or numerical pretreatment standards. Incompatible pollutants are subject to pretreatment standards as provided in 40 CFR 128.133. The amounts of pollutants which would impede the operation of a publicly owned treatment works are prohibited by the provisions of 40° CFR 128.131. Additionally, local pretreatment requirements may apply pursuant to section 510 of the act.

The general pretreatment regulation (40 CFR Part 128) described above and its application to effluent limitations and standards has sometimes caused confusion. In order to correct any lack of clarity, 40 CFR Part 128 is set aside for existing sources within the subparts set forth in paragraph (a) above. In its place, the specific pretreatment standards applicable to each subcategory are set forth in detail below as the limitations or standards for that subcategory. This mechanism will eliminate any possible confusion as to the materials which are limited or controlled by the pretreatment standard for each subcategory.

Sections 429.14, 429.24, 429.34, 429.44, 429.54, 429.64, 429.74, 429.84, 429.94, 429.-104, 429.114, 429.124, 429.134, 429.174 and 429.184 of the regulation set forth below are intended to implement the concepts of 40 CFR 128.133, by stating specific limitations for pollutants which may be discharged to publicly owned treatment plants based upon best practicable control technology currently available. This is accomplished by setting § 128.133 and related sections aside and substituting the specific limitation.

307(b). The findings of this study and technical rationale for the establishment of pretreatment standards are summarized in Appendix A to this preamble.

rized in Appendix A to this preamble. The report entitled "Supplemental for Pretreatment to the Development Document for the Timber Products Processing Point Source Category" details the additional technical analysis undertaken in support of the interim final regulation set forth herein and is available for inspection at the EPA Public Information Reference Unit, Room 2922 (EPA Li-brary), Waterside Mall, 401 M St., SW., Washington, D.C. 20460, at all EPA Re-gional offices and at State water pollution control offices. A supplementary analysis prepared for EPA of the possible economic effects of the regulation is also available for inspection at these locations. Copies, of both of these documents are being sent to persons or institutions affected by the proposed regulation or who have placed themselves on a mailing list for this purpose (see EPA's Advance Notice of Public Review Procedures, 38 FR 21202, August 6, 1973). An additional limited number of copies of both reports are available. Persons wishing to obtain a copy may write the Environmental Protection Agency, Effluent Guidelines Division, Washington, D.C. 20460, Atten-tion: Distribution Officer, WH-552.

When this regulation is promulgated in final rather than interim form, revised copies of the technical documentation will be available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Copies of the economic analysis document will be available through the National Technical Information Service. Springfield, VA. 22151.

## (c) PUBLIC PARTICIPATION

Prior to this publication, many agencies and groups were consulted and given an opportunity to participate in the development of these standards. As a rcsult of comments received following publication of the proposed regulation and upon further consideration by the Agency, additional study of the pretreatment requirements for the timber products processing category has been made. Immediately prior to this rulemaking the results of this study were circulated for additional comments to persons known to be interested. A summary of public participation in this rulemaking, public comments and the Agency's response and reconsideration of these is contained in Appendix B of this preamble.

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#### (d) ECONOMIC IMPACT AND INFLATIONARY IMPACT ANALYSIS

No economic impact is expected for any of the timber processing subcategories other than the wood preserving subcategories. The economic impact for the wood preserving subcategories of the timber processing industry is expected to affect less than 10 percent of the total plants. Total industry investment required to comply with the pretreatment standards is estimated at 5.34 million dollars. Total annual cost is estimated at 1.72 million dollars per year. A small

price increase as a result of the regulations is expected although it is unlikely that the full cost of the regulation will be passed on to the consumer. Based on the economic analysis a total of six plants are listed as potential closures, three inorganic salt plants and three plants which use organic preservatives or both types of preservatives. The economic impact is discussed in greater detail in Appendix A.

The Agency is subject to an order of the United States District Court for the District of Columbia entered in "Natural Resources Defense Council v Train et al. (Civ. No. 2153-73, 75-0172, 75-1698 and 75-1267) which requires the promulgation of pretreatment standards for this industry category no later than October 15, 1976. This order also requires that such regulations become effective on December 9, 1976.

It has not been practicable to develop and republish regulations for this category in proposed form, to provide a 30day comment period, and to make any necessary revisions in light of the comments received within the time constraints imposed by the court order referred to above. Accordingly, the Agency has determined pursuant to 5 U.S.C. 553 (b) that notice and comment on the interim final regulations prior to promulgation would be impracticable and contrary to the public interest. Good cause is also found for these regulations to become effective immediately upon publication.

Interested persons are encouraged to submit written comments. Comments are particularly requested from small wood preserving plants, as information on these plants is most important in assessing the likely economic impact. Comments should be submitted in triplicate to the Environmental Protection Agency, 401 M St., SW., Washington, D.C. 20460. Attention: Distribution Officer, WH-552. Comments on all aspects of the regulation are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which are available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data suggest amendment or modification of the regulation. In the event comments address the approach taken by the Agency in establishing pretreatment standards, EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of section 307(b) of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Public Information Reference Unit, Room 2922 (EPA Library), Waterside Mall, 401 M Street, SW., Washington, D.C. 20460. A copy of the technical study and economic study referred to above, and certain supplementary materials will be maintained at this location for public review and copying. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

All comments received within sixty days will be considered. Steps previously taken by the Environmental Protection Agency to facilitate public response within this time period are outlined in the advance notice concerning public review procedures published on August 6, 1973 (38 FR 21202).

In addition, section 8 of the FWPCA authorizes the Small Business Administration, through its economic disaster loan program, to make loans to assist any small business concern in effecting additions to or alterations in their equipment, facilities, or methods of operation so as to meet water pollution control requirements under the FWFCA, if the concern is likely to suffer a substantial economic injury without such assistance.

For further details on this Federal loan program write to EPA, Office of Analysis and Evaluation, WH-586, 401 M St., SW., Washington, D.C. 20460.

In consideration of the foregoing, 40 CFR Part 429 is hereby amended as set forth below.

Dated: November 30, 1976.

RUSSELL E. TRAIN,

Administrator.

APPENDIX A-TECHNICAL SUMMARY AND BASIS FOR REGULATIONS

- This Appendix summarizes the basis of interim final pretreatment standards for existing sources.

(1) General methodology. The protreatment standards set forth herein were developed in the following manner. The point source category was first studied for the purpose of determining whether ceparate pretreatment standards are appropriate for different segments within the category. This analysis included a determination of whether differences in raw materials used, product produced, manufacturing process employed, age, size, wastewater constituents and other factors require development of separate standards for different segments of the point source category. The raw waste characteristics for each such segment were then identified. This included an analysis of the source, flow and volume of water used in the process employed, the sources of waste and waste waters in the operation and the constituents of all wastewater. The constituents of the vacto waters which should be subject to pretreatment standards were identified.

The control and treatment technologies existing within each segment were identified. This included an identification of each distinct control and treatment technology, including both in-plant and end-of-process technologies, which is existent or capable of being designed for each segment. It also included an identification of, in terms of the amount of constituents and the chemical, physical, and blological characteristics of pollutants, the effluent level resulting from the application of each of the technologies. The problems, limitations and reliability of each treatment and control technology were also identified. In addition, the nonvater quality environmental impact, such as the effects of the application of such technologies upon other pollution problems, including air, solid waste, noise and radiation were identified. The energy requirements of each control and treatment technology were determined as well as the cost of the application of such technologies. The information, as outlined above, was then evaluated in order to determine what levels of technology constitute the best practicable pretreatment technology. In identifying such technologies, various factors were considered. These included the total cost of application of technology, the age of equipment and facilities involved, the process employed, the ongineering aspects of the application of various types of control techniques, process changes, nonvater quality environmental impact (including energy requirements) and other factors.

The data upon which the above analysis was performed included EPA permit applications, EPA sampling and inspections, consultant reports and industry submission

ant reports, and industry submissions. (3) Summary of conclusions with respect to cections of the timber products proceeding point course category.

to tections of the timber products products point cource category. (1) Categorization. The timber products processing point cource category was subcategorized, in support of the direct discharger limitations, primarily on process considerations. With the exception of the wood preserving segment of the industry, the pollutants resulting from these operations were compatible with POTW capabilities to treat without interference to the operation of the FOTW. Therefore, these subcategories are not required to meet specific pollutant parameter limitations, only the general provisions applicable to all dischargers to POTW.

required to meet specific pollutant parameter limitations, only the general provisions applicable to all dischargers to POTW. The wood preserving industry was previously subcategorized for the direct discharging segment based on process factors. Consideration of wood preserving processes determined the volume of process wastewater generation. At the time the direct discharger subcategorization was finalized, study of two subcategorization was finalized, study of two subcategorization was finalized, study of the practiced by a significant number of plants. The wood preserving industry has made algulity and quantity of process wastewater generated in the three year period since the Agency undertook the development of effluent limitations and standards for the direct discharging segment of the industry. Subcategorization, as it relates to wood precerring facilities that discharge to POTW, in addition to considering process, raw materials, plant age, plant size, and other factors also considers the treatability of the POTW, and their affect on the operation of the POTW. Consideration of these factors and the Congress' report, that indicated that

Subcategorization, an it relates to wood preserving facilities that discharge to POTW, in addition to considering process, raw materials, plant age, plant size, and other factors also considers the treatability of the POTW, and their affect on the operation of the POTW. Consideration of these factors and the Congress' report, that indicated that it was the intent of the Congress to promote the use of publicly owned treatment works, as long as the pollutants discharged to the POTW did not interfere with, or pass through untreated, led the Agency to the conclusion that, with the exception of the wood prescrving subcategory (Subpart F), effluents from all other subcategories in the industry, including the wood preserving-steaming subcategory (Subpart G), and the wood precerving-boultonizing subcategory (Subpart H), would be acceptable to the receiving POTW.

The report that serves as technical base for these limitations suggested that the wood preserving industry could be subcategorized on the type of preservative used i.e., water based, or petroleum based. This suggestion was made because the volume of process wasterater generated was in the same range for both the steam subcategory and the boultonizing subcategory, and because the quality of the wastewater generated was in the same range.

The standards presented below are subcategorized in the same manner as the direct discharging segment. This approach was taken to keep the regulation (40 CFR Part 420) in a straightforward, understandable

format. Because the wastewater characteris-tics are generally the same for the wood preserving-steam and wood preserving-boultonizing subcategories, the pretreatment technology requirements and the applicable limitations are the same for these two subcategories.

(ii) Waste characteristics. The volume of the process water generated by the timber industry, for most segments is usually mini-mal, most segments are essentially non water using establishments. Exceptions to this are the wet process hardboard, wet storage, and some portions of the wood preserving industry. The primary pollutants present in waste-water from the majority of this industry are BOD5, total suspended solids and pH, com-patible pollutants according to 40 CFR Part 128. The volume of wastewater discharged by the wood preserving segment is similar to the volume discharged by plants discharging di-rectly to the environment. Thirty two per-cent of plants discharging to a POTW dis-charge less than 1,000 gallons per day. The average volume discharged is less than 8,000 gallons per day. Fifty nine percent of these plants discharge once-through cooling water.

Materials present in wood preserving waste waterians present in wood preserving waste waters include phenols, COD, oil and grease, pentachlorophenol copper, chromium, ar-senic, zinc, boron, ammonia nitrogen and phosphate. Average discharges of phenol and pentachlorophenol are 3.66 and 0.24 kiloprams per day, respectively. Average waste loading per plant for copper, chromium, and arsenio are 5.5, 16.4, and 0.9 grams per day, respectively. Zinc discharge averages 0.2 kilograms per day, and boron averages 0.02 kilo-grams per day. Average concentration of these pollutants found during the study supporting these regulations are: phenols, 165 mg/1; pentachlorophenol 26 mg/1; oll and grease 267 mg/1; COD, 4368 mg/1; copper 2.2 mg/1, total chromium 1.7 mg/1; arsenic 0.04 mg/1; boron 0.8 mg/1. Zinc was found at a level of 41 mg/1, however, this plant did not practice a treatment technology for re-duction of zinc.

(iii) Origin of wastewater pollutants. Typically, waste waters from creosote and pentachlorophenol treatments have high phenolic, COD, and oil contents and may have a turbid appearance that results from emulsified oils. They are always acid in reaction, the pH values usually falling within the range of 4.0 to 6.0 The high COD contents of such wastes are caused by entrained oils and by wood extractives, principally simple sugars, that are removed from wood during steam conditioning. These waste waters may also contain traces of copper, chromium, arsenic, zinc, and boron at plants that use the same retort for both waterborne saits and oil-type preserva-tives, or that apply dual treatments to the same stock; i.e., treat with two preservatives, one of which is a salt formulation.

(iv) Treatment and control technology. Wastewater treatment and control technologies have been studied for each subcategory of the industry to determine what is the best practicable pretreatment technology.

The technology required to achieve the limitation presented for the wood preserving subcategory (Subpart F) includes the im-plementation of the following practices and procedures:

Elimination of equipment and piping leaks, and minimization of spills by the use of good housekeeping techniques; recovery and reuse of contaminated water, generated in processes employing salt-type preserva-tives and fire-retardant formulations, such as the water used to flush the retort when production switches from salt-type to oll-type preservative treatment, as make-up water for treating solutions; the installation of a cover or roof to prevent precipita-tion (rain and snow) from entering the

treating area, and a concrete slab to direct process drainage to solution make-up system; segregation of contaminated and uncontaminated water streams. The latter in-cludes condensate from heating coils and heat exchangers, and noncontact cooling water.

Achievement of the pretreatment limita tions for the wood preserving-steam sub-category (Subpart G) and the wood pre-serving-boultonizing subcategory  $\cdot$  (Subpart H) include:

The use of oil separation equipment and the use of flocculation-filtration, floccula-tion-decantation, or comparable technology to reduce the oil and grease so that, at the point of discharge to the POTW, it is less than 100 mg/1; segregation of contaminated and uncontaminated process water streams; minimization of wastewater volume by the implementation of rigorous in-plant water conservation practices; elimination of equip-ment and plumbing leaks; the use of equali-zation facilities to assist in the maintenance of a uniform flow through the treatment train; the segregation of salt-type treating solutions and oil-type treating solutions in solution preparation and recovery systems.

The regulation presented below establishes limits for copper, chromium and arsenic for wood preserving plants treating with both oil- and water-based solutions. These limitations are based levels being currently achieved by plants. There is no treatment technology required to achieve these levels for metals. Housekeeping procedures cur-rently practiced in the industry will result in the achievement of this level of control. Solid waste control must be considered.

Pretreatment control technology, as known today, requires disposal of the pollutants removed from waste waters in this industry in the form of solid wastes and liquid con-centrates. These constituents may be haz-ardous and may require special consideration. In order to insure long-term protection of the environment from these hazardous of the environment from these hazardous or harmful constituents, special considera-tion of disposal sites must be made. All landfill sites where such hazardous wastes are disposed should be selected so as to prevent horizontal and vertical migration of these contaminants to ground or surface waters. In cases where geologic conditions may not reasonably ensure this, adequate legal and mechanical precautions (e.g., impervi-ous liners) should be taken to ensure long term protection to the environment from hazardous materials. Where appropriate, the location of solid hazardous materials disposal sites should be permanently recorded in the appropriate office of legal jurisdiction.

(v) Cost estimates for control of waste-water pollutants. It is estimated that the average capital costs and total annual costs of achieving a level of pretreatment equiva-lent to primary oil-water separation, floc-culation, filtration and pH adjustment for organic preservative\_plant (Subparts G and H, wood preserving subcategories) would be an estimated \$138,500 capital cost and \$52,480 annual costs. Specific conditions or circumstances may exist that would require a given plant to spend more than this amount.

Plants treating with inorganic salts only and discharging raw waste to the POTW can adopt and install technology currently used by the industry to achieve zero discharge of process wastewater at an average estimated capital cost per plant of \$50,000. The esti-mated number of such plants is 14. Special conditions or circumstances may exist that would require a given plant to spend more than \$50,000.

(vi) Energy requirements and nonwater quality environmental impacts. The energy costs related to the implementation of these regulations are limited to the pumps for

liquid transfer. Most of this equipment is already in place, i.e., oll separation is our-rently practiced at 95-+ percent of plants The flocculation flitration step includes chemical fuel pumps (2 pumps at three horsepower, operating four hours per day). (vii) Economic impact analysis. This sec-tion summarizes the conomic and infla-tionary impacts of the pretreatment stand-

tionary impacts of the pretreatment standards for the Timber Processing Point Source Category. No economic impact is expected for any of the Timber Processing Subcate-gories other than the wood preserving sub-categories. Thus, this summary deals only

with the wood preserving subcategories. Executive Order 11821 (November 27, 1974) requires that major proposals for leg-Islation and promulgation of regulations and rules by agencies of the executive branch be accompanied by a statement certifying that the inflationary impact of the pro-posal has been evaluated. The Administrator has directed that all regulatory actions which are likely to exceed any of the following four

are likely to exceed any of the following four criteria will require certification. 1. Additional national annualized costs of compliance, including capital charges (in-terest and depreciation), will total \$100 million within any calendar year by the attainment date, if applicable, or within five years of implementation.

2. Total additional cost of production of any major product is more than 5 percent of the selling price of the product. 3. Net national energy consumption will be increased by the equivalent of 25,000 bar-

rels of oil a day (equal to  $50 \times 10^{10}$  BTU per year or  $5 \times 10^{\circ}$  kilowatt-hours per year). 4. Additional annual demands are created

or annual supply is decreased by more than 3 percent for any of the following materials s percent for any of the following materials by the attainment date, if applicable, or within five years of implementation: plate steel, tubular steel, stainless steel, cerap steel, aluminum, copper, manganese, mag-nesium, zinc, ethylene, ethylene glycol, liq-uified petroleum gases, ammonia, urca, plas-tics wither to the public or public

tics, synthetic rubber, or pulp. The table below presents the estimated cost of complying with the Pretreatment Standards for the Wood Preserving Subcategories.

ESTIMATED PRETREATMENT COSTS 1

Subcategory <sup>2</sup>	Total invest- ment	Total #4 annual cost	Percent of selling price
Inorganic preserva- tives only	650	130	1.0-07
Organie preserva- tives only	2, 632	1,001	. 9-10. 5
Both type of pre- servatives	1,853	610	. 9- 7.2
Total	5,010	1,741	******

Represent the additional investment and annual costs required to meet the protreatment standards for dischargers to publicly owned treatment works.
Bubcategories are those employed by the conoucle impact analysis and not that used in the regulations.
All costs are in thousands of 1076 dollars.
Total annual costs are equal to operation and maintenance costs plus a capital cost based on a ton (10) yr dopreciation and a ten (10) pot interest rate.
Represents the range of unit annual costs as a percent of selling price for each of the plants in the otherategory, Based on August 1070 price the 011 x 8 in x 8 it 6 in, Chicago, red oak, carload lots.

Source: Draft "Supplement for Protreatment to the Development Document for the Timber Processing Point Bource Category," Environmental Protection Agency estimates.

As can be seen above, total national annualized costs of compliance for the Pretreatment Standards are well below \$100 million per year. Energy consumption will be increased by a nominal amount. The projected increase in domand or decrease in

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supply for any of the above materials is nominal. The increase in cost of production is greater than 5 percent of the selling price in some cases and thus an inflationary impact statement is necessary.

The Agency has considered the economic impact of the internal and external costs of the effluent limitations guidelines. Internal costs (see table above) are defined as investment and annual costs, where annual cost is composed of operating costs, maintenance costs, the cost of capital, and depreciation. External cost deals with the assessment of the economic impact of the internal costs in terms of price increases, production curtailments, plant closures, resultant unemployment, community and regional impacts, international trade, and industry growth.

international trade, and industry growth. For the inorganic salt-type plants a substantial portion of abatement cost will be passed on to the consumer through a price increase. Based on estimates by the economic impact contractor only three (3) plants owned by single plant firms are potential closures.

For the plants using organic and both types of preservatives a small price increase is also expected. It is unlikely that the full costs of the Pretreatment Standards will be passed on to the consumer. Based on estimates by the contractor it is estimated that three (3) plants using organic or both types of preservatives are potential closures as a result of the Pretreatment Standards.

#### APPENDIX B-SUMMARY OF PUBLIC PARTICIPATION

Prior to this publication, a draft supplement for pretreatment to the development document for the timber products processing point source category was sent to all particlpants and comments were solicited on that report. The following are the principal agencies and groups consulted: (1) Effluent Standards and Water Quality Information Advisory Committee (established under section 515 of the Act); (2) all State and U.S. Territory Pollution Control Agencies; (3) American Wood Preservers Association; (6) Quality. Wood Preservers Solety; (6) Society of American Wood Preservers; (7) National Forest Products Association; (8) Southern Pressure Treaters; and (9), U.S. Department of Commerce.

The following responded with comments: American Wood Preservers Institute; American Wood Preservers Association; Effluent Standards Water Quality Information Advisory Committee; U.S. Department of Commerce; EPA, Region VI, Fermit Branch; and EPA, National Enforcement Investigation Center.

The more significant issues raised in the development of the interim final pretreatment standards and the treatment of these issues herein are as follows:

(1) One comment was that wood preserving plants discharging to a POTW are usually located in urban areas, and the cost of urban land is higher in urban areas; the use of land-based technology to control pollutant discharge is too costly.

discharge is too costly. In the technical study supporting these regulations, about twenty-five percent of known wood preserving plants discharging to POTW were visited. Land availability was not a problem at any of these plants. The maximum area of land needed to install the technology capable of achieving the limitations promulgated is equal to 0.10 hectare (0.25 acre).

acre). (2) A comment suggested that the discussion of metal salt treating solutions should include ammonical copper arsenate (ACA) and chromated zinc chloride (CZC) as well as fluor chrome arsenate phenol (FCAP). The Agency agrees with this comment. The

The Agency agrees with this comment. The document supporting these standards has

been revised to clarify this section. The levels of control possible using available currently practiced treatment and control technology, as presented in the draft document as well as the section on industry subcategorization, illustrate that these salt materials were considered.

(3) A commenter objected that the subcategorization scheme presented in the draft report separates salt treating (water-based) operations from processes using oil-based preservatives.

The rationale for presenting a separate subcategory for salt-only plants is that process water used in calt-only treating plants is 100 percent recyclable. Approximately 80 percent of salt-only plants are currently achieving no discharge of process wastewater pollutants. It is technically and economically feasible for this segment of the industry to eliminate the discharge of process wastewater pollutants while, for oil-baced plants, it may not be. (4) One comment indicated that penta-

(4) One comment indicated that pentachlorophenol (PCP) was soluble in water within a range of 15 to 40 milligrams per liter (mg/l), depending on temperature, pH, and entrained oil content of the water. Therefore, the support document underestimates the solubilities that would be found in process waters when it states 15 to 20 mg/l solubility.

20 mg/1 solubility. PCP is more soluble in water at higher temperatures and at higher pH, in particular at pH greater than 9. The usual pH range of process water after treatment is in the range of 4.5 to 6, according to the information available to the Agency at this time. During the analytical measurements conducted during this study, PCP concentrations of less than 8 mg/1 were found in twenty-five percent of the samples. The apparent conclusion from this is that PCP is selectively absorbed in the oil phase of the process stream. It is the preliminary conclusion that effective oil removal will reduce the FCP levels to less than its solubility in water. The Agency solicits any additional information regarding this phenomenon that is available. (5) A number of comments were received

(5) A number of comments were received regarding apparently unclear statements in the draft document, errors in conversions between English units and metric units, definitions of terms, and transposed numbers in the tabulations.

Clarification of terms and meanings, corrections in tables, correction of mathematical errors have been made in the document supporting these standards (EPA 440/1-76/080). (6) One comment indicated that technol-

(6) One comment indicated that technology from the petroleum industry is not readily transferable to the wood preserving industry because there are significant differences in the processes, penta-oil emulsions, creosote petroleum emulsions, and emulsified solids.

The levels of PCP presented in the draft document are the levels currently being discharged by nine of the fifteen plants sampled during this study. Six of those plants treat wood with pentachlorophenol. The support document does not suggest the transfer of technology from the petroleum industry. Oil separation is currently practiced in the wood preserving industry. The type of oil separating equipment used in the wood preserving industry frequently is American Petroleum Institute (API) type equipment, i.e., patterned after oil separating equipment, developed and refined by API.

(7) A commenter questioned the cost estimate (in his opinion low) presented in the draft document for installing the equipment or facilities that a salt-only plant would need to achieve no discharge from a plant.

to achieve no discharge from a plant. The cost estimate (\$50,000) presented in the draft report was determined from actual cost information supplied by plants. These costs were reviewed by competent engineers knowledgeable of the construction field. The Agency agrees that there may be specific situations where the costs may be underestimated. However, these costs are considered average. The Agency solicits the submission of cost information to support the contention that the costs precented are too low. (8) A question was acked about the levels of control presented in the draft report;

(8) A question was acked about the levels of control presented in the draft report; were the levels determined from the average of the effluent from the better existing plants or from what the better existing plants are expected to perform? The levels of control presented in the draft

The levels of control presented in the draft document reflected effluent quality currently being achieved by plants with the type of treatment systems presented in the document. Twenty-five out of thirty-six oil and greace samples analyzed during this study were less than 100 mg/l. (9) One comment stated that the charging

(9) One comment stated that the charging of fifty percent of the operating costs of the oil separation-flocculation process to normal plant operating expense as opposed to pollution control cost was invalid. Agency review of this item indicated that

Agency review of this item indicated that the assumption may have been invalid. Costs were recalculated, based on charging the total operating costs to pollution control. The Agency believes, however, that there is some economic benefit to the plant resulting from effective oil control. These cost estimates were then used in the economic impact analysis.

(10) The ability of an API separator to achieve 80 mg/1 was questioned. Presence of emulsions, process mechanics and other variables such as seasonal variation of the raw wood product were given as reasons for doubting this performance level.

The draft document considers the application of a flocculation-filtration or -decantation system in conjunction with an oll separation stage. Sampling conducted during the study indicated that 67 percent of the samples analyzed were less than 80 mg/1. The document also stated that in order to obtain effective flocculation filtration results, effective oil separation is essential. The promulcated oil and grass limit is 100 mg/1:

tive oil separation is essential. The promulgated oil and grease limit is 100 mg/1: (11) One comment questioned a statement in the document that implied biological treatment could reduce oil and grease levels to less than 10 mg/.

to less than 10 mg/. This statement in the report was probably unclear. Oil and grease concentrations are usually not reduced by biological treatment. The oil and grease may settle out, or be picked up in the sludge generated by the biological treatment, rather than being reduced by biological activity. (12) A commenter questioned the stochio-

(12) A commenter questioned the stochlometric ratios presented in the document, stating that there are three formulations of COA preservative, each with different ratios of active ingredients.

of active ingredients. The Agency is aware that there are three formulations. CCA. Type B, was used because it has the highest weight percentage of copper. Copper, at the highest concentration found, was the basis for the achievable level of control for the metals. The stochlometric method of determining the limitation has been eliminated.

(13) One commenter stated that he understood that the law required "that specific pollutant limits be determined by the ability of the POTW to handle that concentration without detrimentally affecting its operation."

That is true. In addition to that consideration, the Agency must develop controls for those pollutants that would not be effectively treated by the POTW.

(14) A commenter questioned the consideration of the application of biological treatment as a pretreatment technology.

ment as a pretreatment technology. The Agency was attempting, in the document, to present the full range of treatment

and control technology. Situations may exist, in the field, where pollutants present in this wastewater would not be adequately treated by a POTW. Raw waste waters re-quire an acclimated biota for effective treatment; the biota might not be present in the POTW, resulting in inadequate treatment. Biological treatment, with acclimated biota, is feasible. It is not, however, a basis for the promulgated standard.

(15) One commenter indicated that the draft document did not adequately consider the practicality of a no discharge limitation for the steam and boultonizing subcategories. It is being achieved, and at least one State is currently issuing permits that allow no dis-charge of process wastewater after July 1, 1977

While "no discharge of process waste-water" may be achievable in certain situations, it is not feasible for a national stand-ard at this time. Further investigation and. study will be made to evaluate its feasibility.

(16) One commenter questioned the in-formation on the effect of metals on anaerobic digestion because the information did not indicate where the concentrations of metals in the system occurred.

Review of the reference indicates that the metals concentrations that inhibited bio-logical activity were found in the mixed liquor phase of the system.

#### § 429.10 [Amended]

1. Section 429.10 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word 'discharges."

2. Subpart A is amended by adding § 429.14 as follows:

§ 429.14 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the barking subcategory, the provisions of 40 CFR Part 128 shall not apply. The pre-treatment standards for an existing source within the barking subcategory are set forth below.

(a) No pollutant (or pollutant prop-erty) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause cor-rosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interfer-ence with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general pro-hibitions set forth in paragraph (a) of this section, the following pretreatment

standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or Pretreatment pollutant property standard BOD- \_\_\_\_ -- No limitation. TSS \_\_\_\_\_ Ďο. рН \_\_\_\_\_ Do.

§ 429.20 [Amended]

3. Section 429.20 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

4. Subpart B is amended by adding § 429.24 as follows:

§ 429.24 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the veneer subcategory, the provisions of 40 CFR Part 128 shall not apply. The pre-treatment standards for an existing source within the veneer subcategory are set forth below.

(a) No pollutant (or pollutant prop-erty) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause cor-rosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or	Pretreatment
pollutant property	standard
BOD5	No limitation.
TSS	Do.
pH	Do.

#### § 429.30 [Amended]

5. Section 429.30 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

6. Subpart C is amended by adding § 429.34 as follows:

§ 429.34 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the plywood subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the plywood subcategory are set forth below.

(a) No pollutant (or pollutant prop-erty) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corro-sive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such polluants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant prop-erties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or	Pretreatment
pollutant property	standard
BOD5	No limitation.
TSS	Do.
pĦ	Do.

§ 429.40 [Amended]

7. Section 429.40 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

8. Subpart D is amended by adding § 429.44 as follows:

§ 429.44 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the hardboard-dry process subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the hardboard-dry

a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall

not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corro-. sive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designated to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of-pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

<ul> <li>Pollutant or</li> </ul>	Pretreatment
pollutant property	standard
BOD5	No limitation.
TSS	Do.
pH	Do.

§ 429.50 [Amended]

9. Section 429.50 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

10. Subpart E is amended by adding § 429.54 as follows:

§ 429.54 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section. 307 (b) of the Act for a source within the hardboard-wet process subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the hardboardwet process subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with gpH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works. (4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into. a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or	Pretreatment
pollutant property	standard
BOD5	No limitation.
TSS	Do.
рН	Do.

# § 429.60 [.Amended]

11. Section 429.60 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

12. Subpart F'is amended by adding § 429.64 as follows:

§ 429.64 Pretreatment standard for existing sources. 4

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the wood preserving subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the wood preserving subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart. Pretreatment standard. No discharge of process wastewater pollutants.

§ 429.70 [Amended]

13. Section 429.70 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

14. Subpart G is amended by adding § 429.74 as follows:

§ 429.74 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the wood preserving-steam subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the wood preserving-steam subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

	Pretreatment standard	
Pollutant or pollutant property	Maximum for any 1 day (milligrams per liter)	Maximum for any 1 day (grams per cubic moter production)
Oll and greace Copper Chromium	100 5 4	20.5 .62 .41 .41

# § 429.80 [Amended]

15. Section 429.80 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

16. Subpart H is amended by adding § 429.84 as follows:

§ 429.84 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the wood preserving-boultonizing subcate-gory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the wood preserving-boultonizing subcategory are set forth below. (a) No pollutant (or pollutant prop-

erty) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corro sive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

ŕ	Pretreatment standard	
Pollutant or pollutant property	Maximum for any 1 day (milligrams per liter)	Maximum for any 1 day (grams per cubic meter production)
Oil and grease Copper Chromium	100 5 4	20. 5 .62 .41

§ 429.90 [Amended]

17. Section 429.90 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

18. Subpart I is amended by adding § 429.94 as follows:

§ 429.94 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the wet storage subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the wet storage subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a), the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or	Pretreatment
pollutant property	standard
BOD5	No limitation.
TSS	Do.
pH	Do.

# § 429.100 [Amended]

19. Section 429.100 is amended by inserting the phrase "and to the introduc-tion of pollutants into treatment works which are publicly owned" after the words "discharges." 20. Subpart J is amended by adding

§ 429.104 as follows:

§ 429.104 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under Section 307 (b) of the Act for a source within the of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the log washing subcategory are set forth below.

> (a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

> (1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

> (2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time pe-riods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of polltuants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or Pretreatment pollutant property standard BOD5 No limitation. TSS\_\_\_\_\_ Do. Do. pH\_\_\_\_\_

§ 429.110 [Amended]

21. Section 429.110 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

22. Subpart K is amended by adding § 429.114 as follows:

§ 429.114 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the sawmills and planing mills subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the sawmills and planing mills subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corro-sive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quan-

tity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or	Pretreatment
pollutant property	standard
BOD5	No limitation.
TSS	Do.
pH	Do.
· · · · · · · · · · · · · · · · · · ·	

§ 429.120 [Amended]

23. Section 429.120 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

24. Subpart L is amended by adding § 429.124 as follows:

- § 429.124 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the finishing subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the finishing subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or pollutant	Pretreatment
• property	standarð
BOD5	No limitation.
TSS	Do.
pH	Do.
-	

## § 429.130 [Amended]

25. Section 429.130 is amended by inserting the phrase "and to the intro-duction of pollutants into treatment works which are publicly owned" after the word "discharges."

26. Subpart M is amended by adding § 429.134 as follows:

§ 429.134 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the particleboard subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the particleboard subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Follutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

Pollutant or pollutant	Pretreatment
property	standard
BOD5	No limitation.
TSS	Do.
nĦ	Do.

§ 429.170 [Amended]

27. Section 429.170 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

28. Subpart Q is amended by adding § 429.174 as follows:

§ 429.174 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under section 307 (b) of the Act for a source within the wood furniture and fixture production without water wash spray booth(s) or laundry facilities subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the wood furniture and fixture production without water wash spray booth(s) or laundry facilities subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a pH lower than 5.0, unless the works is designed to accommodate such pollutants.

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.

(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency.

(b) In addition to the general prohibitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quantity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treatment works by a source subject to the provisions of this subpart.

 
 Pollutant or pollutant property
 Pretreatment standard

 BOD5
 No limitation.

 TSS
 Do.

## § 429.180 [Amended]

29. Section 429.180 is amended by inserting the phrase "and to the introduction of pollutants into treatment works which are publicly owned" after the word "discharges."

30. Subpart R is amended by adding § 429.184 as follows:

§ 429.184 Pretreatment standard for existing sources.

For the purpose of establishing pretreatment standards under Section 307 (b) of the Act for a source within the wood furniture and fixture production with water wash spray booth(s) or with laundry facilities subcategory, the provisions of 40 CFR Part 128 shall not apply. The pretreatment standards for an existing source within the wood furniture and fixture production with water wash spray booth(s) or with laundry facilities subcategory are set forth below.

(a) No pollutant (or pollutant property) introduced into a publicly owned treatment works shall interfere with the operation or performance of the works. Specifically, the following wastes shall not be introduced into the publicly owned treatment works:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works.

(2) Pollutants which will cause corrosive structural damage to treatment works, but in no case pollutants with a

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pH lower than 5.0, unless the works is designed to accommodate such pollutants. (3) Solid or viscous pollutants in

(3) Solid or viscous pollutants in amounts which would cause obstruction to the flow in sewers, or other interference with the proper operation of the publicly owned treatment works.
(4) Pollutants at either a hydraulic flow rate or pollutant flow rate which is excessive over relatively short time periods so that there is a treatment process of treatment and subsequent loss of treatment

upset and subsequent loss of treatment

efficiency. (b) In addition to the general prohi-bitions set forth in paragraph (a) of this section, the following pretreatment standard establishes the quality or quan-tion of pollutents or pollutent properties tity of pollutants or pollutant properties controlled by this section which may be introduced into a publicly owned treat-ment works by a source subject to the provisions of this subpart.

Pollutant or	"Pretreatment
pollutant property	standard
BOD5	No limitation.
TSS	Do.
pH	Do.

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