

## Title 40—Protection of the Environment

## CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

## SUBCHAPTER N—EFFLUENT GUIDELINES AND STANDARDS

## PART 430—PULP, PAPER, AND PAPERBOARD POINT SOURCE CATEGORY

On January 15, 1974, notice was published in the FEDERAL REGISTER (39 FR 1908), that the Environmental Protection Agency (EPA or Agency) was proposing effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources within the unbleached kraft, sodium base neutral sulfite semi-chemical, ammonia base neutral sulfite semi-chemical, unbleached kraft—neutral sulfite semi-chemical (cross recovery), and paperboard from waste paper subcategories of the pulp, paper, and paperboard mills category of point sources.

The purpose of this notice is to establish final effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources in the pulp, paper, and paperboard category of point sources, by amending 40 CFR Chapter I, Subchapter N, to add a new Part 430. This final rulemaking is promulgated pursuant to sections 301, 304 (b) and (c), 306 (b) and (c) and 307(c) of the Federal Water Pollution Control Act, as amended, (the Act); 33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c) and 1317(c); 86 Stat. 816 et seq.; Pub. L. 92-500. Regulations regarding cooling water intake structures for all categories of point sources under section 316(b) of the Act will be promulgated in 40 CFR Part 402.

In addition, the EPA is simultaneously proposing a separate provision which appears in the proposed rules section of the FEDERAL REGISTER, stating the application of the limitations and standards set forth below to users of publicly owned treatment works which are subject to pretreatment standards under section 307(b) of the Act. The basis of that proposed regulation is set forth in the associated notice of proposed rulemaking.

The legal basis, methodology and factual conclusions which support promulgation of this regulation were set forth in substantial detail in the notice of public review procedures published August 6, 1973 (38 FR 21202) and in the notice of proposed rulemaking for the unbleached kraft, sodium base neutral sulfite semi-chemical, ammonia base neutral sulfite semi-chemical, unbleached kraft—neutral sulfite semi-chemical (cross recovery), and paperboard from waste paper subcategories. In addition, the regulations as proposed were supported by two other documents: (1) The document entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Unbleached Kraft and Semi-Chemical Pulp Segment of the Pulp, Paper, and Paperboard Mills Point Source Category" (January 1974) and (2) the document entitled "Economic Analysis of Proposed Effluent Guidelines, Pulp, Paper, and

Paperboard Industry" (September 1973). Both of these documents were made available to the public and circulated to interested persons at approximately the time of publication of the notice of proposed rulemaking.

Interested persons were invited to participate in the rulemaking by submitting written comments within 30 days from the date of publication. Prior public participation in the form of solicited comments and responses from the States, Federal agencies, and other interested parties were described in the preamble to the proposed regulation. The EPA has considered carefully all of the comments received and a discussion of these comments with the Agency's response thereto follows.

## (a) Summary of comments.

The following responded to the request for written comments contained in the preamble to the proposed regulation: The Water Pollution Control Federation; State of Wisconsin—Department of Natural Resources; U.S. Water Resources Council; Flambeau Paper Co.; P. H. Glatfelter Co.; Olinkraft Co.; Consolidated Packaging Corp.; State of New York—Department of Environmental Conservation; State of Montana—Department of Health and Environmental Services; County Sanitation Districts of Los Angeles County; Longview Fibre Co.; Brown Co.; Mead Corp.; Hammermill Co.; Inland Container Corp.; Owens—Illinois Co.; Potlatch Co.; Columbia Corp.; St. Regis Paper Co.; National Council for Air and Stream Improvement; Container Corp. of America; Continental Can Co.; Crown Zellerbach Co.; International Paper Co.; American Paper Institute; Georgia-Pacific Co.; Weyerhaeuser Co.; Hoerner-Waldorf Corp.; Packaging Corp. of America; Green Bay Packaging Co.; Sealright Co.; State of Indiana; State of Illinois; International Ozone Institute; the U.S. Department of the Interior; U.S. Department of Commerce; and the U.S. Department of Health, Education, and Welfare. The following is a summary of the significant comments and the Agency's response to those comments.

(1) Many commenters felt that the effect of temperature upon biological treatment should be accounted for in a variance which is progressive below a specific base temperature and not just a one-step allowance as in the proposed regulations. It was suggested that such a variance for temperature effects should be applied to BATEA and NSPS as well as BPCTCA. Many suggestions were submitted for the base temperature and for a sliding scale which could be applied. Effluent data for several pulp and paper mills were provided with analyses correlating effluent pollutant levels with the effluent temperatures.

The inclusion in the proposed regulations of a variance for the effects of temperature upon biological treatment systems was to allow for the seasonality of effluent treatment efficiency for mills in Northern climates. However, because of the difficulty in implementing the temperature variance in the issuance and

regulation of NPDES permits, the temperature variance was removed from final regulations. The Agency believes that mills located in Northern climates should design their treatment systems to account for the effects of cold temperatures. The limitations, in turn, have been revised to reflect the effects of temperature upon biological treatment systems and other factors such as raw waste load which affect the quality of the final effluent. The final regulations were developed using the maximum month of pollutant discharge of exemplary mills with emphasis on mills located in Northern climates.

(2) Several commenters felt that two stage biological treatment should not be required for BATEA or NSPS. The commenters stated that a well designed one-stage biological system can operate equally as well as a two-stage system and that there is no justification to require mills to add another stage to their one-step biological treatment system to meet the 1983 limitations.

The Agency agrees that a well-designed and operated one-stage biological treatment system can operate equally as well as a two-stage biological system. The intent of including two-stage biological treatment as BATEA was only as an identification of treatment which could meet the limitations. The Agency recognizes that well designed and operated one-stage biological systems will be acceptable as part of BATEA, and the intent was not to require the installation of a second stage to the existing one-stage systems meeting BPCTCA limitations.

(3) Comments were received which stated that several of the mills in the unbleached kraft subcategory chosen as exemplary mills do not represent BPCTCA. The external treatment at these mills includes two-stage biological systems which include aerated stabilization basins followed by storage ponds. The commenters argued that these two-stage systems represent the BATEA since the storage pond's primary purpose is to control the discharge according to the receiving water quality.

The Agency agrees that one of the purposes of the storage ponds is for controlling the discharge to meet receiving water requirements. However, further reductions in BOD<sub>5</sub> and TSS generally occur in the storage ponds, as these ponds are frequently described as storage oxidation ponds. The Agency believes that the two-stage biological system represents BPCTCA at these mills. The design and operation of the aerated stabilization basins are such that the storage oxidation ponds are relied upon to remove BOD<sub>5</sub> and TSS. Thus, the aerated stabilization basins at these particular mills cannot be specified as the BPCTCA. Therefore, the final effluent data from these particular mills was utilized in developing the limitations. In addition, nearly half of the mills in the unbleached kraft subcategory are using storage oxidation ponds for effluent treatment and thus the two-stage system is an available external technology

for this subcategory. However, the Agency recognizes that many mills do not have land available for these large ponds and thus, the limitations were based upon effluent qualities achievable by one-stage biological treatment systems.

(4) A number of commenters felt that the statistical analysis of exemplary mill data from which the limitations were derived allows mills to be theoretically out of compliance 16.5% and 2.5% of the time for the 30 day and daily maximum limitations, respectively. The commenters stated that the exemplary mills will actually be out of compliance a larger portion of the time as the data is skewed to the high side and thus is not normally distributed, and that the limitations should be revised in order for exemplary mills to meet the limitations. Several suggestions were submitted for reevaluation of the data.

The final regulations reflect the removal of the temperature variance and the development of the limitations based upon the maximum month of pollutant discharge from exemplary mills. Thus, the statistical analysis used in developing the proposed regulations was replaced by determination of the maximum month of pollutant discharge. In effect, the maximum month accounts not only for the effect of temperature on final effluent quality but also for other factors such as raw waste load. Therefore, the limitations have been revised so that exemplary mills will be able to comply with the limitations in the final regulations.

(5) A few commenters felt that the effluent limitations should be influenced by receiving water assimilative capacities at each particular site.

Under the Act, it is not necessary that a showing be made regarding the effect of the pollution discharge upon the quality of the receiving water. Under sections 301, 304 (b) and (c), 306 (b) and (c), and 307(c), the principal means of control is through the adoption of effluent limitations directly applicable to the discharge itself. The effluent limitations are to be based upon defined levels of technology which are specified in the Act. Nevertheless, water quality standards are retained as a secondary means of control and will have their principal applicability in those instances where effluent limitations are not stringent enough to provide for the achievement of water quality standards.

(6) Two commenters stated that no effort was made to analyze the considerable discrepancies between short term survey results and exemplary mill data, and to apply the "analytical factor" which was derived as a result of the short term surveys.

As discussed in the Development Document, the purpose of the short term survey was to evaluate the mill sampling and analytical techniques. A possible result of the evaluation was the development of an analytical factor which could be used to convert, if necessary, all data to a common basis. After considerable effort was made in examination of the mill techniques, it was concluded that

the application of an "analytical factor" was not possible because of the wide variations in techniques and resulting data. Instead, the data derived using nonstandard methods or faulty techniques was not utilized in the development of the limitations.

(7) Several commenters felt that the data base does not include an adequate number of mills to represent the subcategories under study.

The data utilized in the development of the proposed regulations included all of the data available at the time. However, the data base has recently been greatly expanded through submission of data to the Agency from individual mills and from the pulp and paper industry technical association and is presented in the Development Document. The resultant data base utilized in developing the final regulations included data and information on 67 mills out of a total of 188 mills. The Agency believes that the data base more than adequately represents the subcategories under study.

(8) Comments were made stating that the technology of mixed-media filtration has not been demonstrated in the pulp and paper industry and thus should not be included as a technology for NSSC.

The Agency believes that the technology of mixed-media filtration is transferrable technology from other industrial categories and from municipal treatment systems. However, since mixed-media filtration has only been demonstrated on a pilot plant scale in the pulp and paper industry, mixed-media filtration has been removed from the identified technologies for new sources, and the limitations were adjusted accordingly.

(9) A large number of comments were made which stated that color removal by reverse osmosis, which is recommended in the proposed regulations as the color removal technology for NSSC mills, has not been demonstrated. It was stated that the mill referenced in the Development Document as demonstrating reverse osmosis for color removal is an atypical mill and is not using reverse osmosis specifically for color removal. It was pointed out that the reduction in color is actually an additional benefit of the reverse osmosis operations for water reuse. Thus, commenters suggested that the limitations for color for the NSSC subcategories should be removed from the final regulations.

The Agency acknowledged in the Development Document that the technology of reverse osmosis for color removal has not been fully demonstrated. Thus, color removal was not included for new sources for the NSSC subcategories. However, the Agency believes that reverse osmosis will be further demonstrated and will be an available technology for color removal by 1983. In addition, the technologies of ion exchange-resin adsorption and ultrafiltration as discussed in the Development Document are projected to be available to reduce color in pulp and paper mill effluents by 1983. Thus, the Agency is recommending reverse osmosis for NSSC

mills for color removal for 1983, but other color removal technologies are also projected to be available for implementation in 1983.

(10) Three commenters stated that the variance for hydraulic barking should be increased to more realistically account for waste loads from the process. Several suggestions for additional allowances of BOD5 and TSS were submitted.

Hydraulic barking is not a wide-spread practice in this segment of the industry. Information available indicates that only one mill in the country, which is included in the subcategories under study, uses hydraulic barking. Data from the mill indicate that the mill will be able to meet the regulations without any additional allocation for its hydraulic barking operation. In addition, many State policies have been either to close-up or to phase-out hydraulic barkers. Thus, the hydraulic barking variance was removed from the final regulations.

(11) Several commenters suggested an approach to developing the limitations. Essentially, the approach involved determining average BOD5 raw waste loads for the industry and applying 85% reduction which was said to be representative of biological treatment. To determine the TSS limitations, it was suggested that the mill operating data be used.

The limitations are based upon mills which treat their waste waters by technologies representing BPCTCA. Thus, mill operating data is the basis for the limitations when available and not the application of an assumed pollutant reduction efficiency.

(12) Several comments were received which stated that the differences in total suspended solids concentrations resulting from testing methods utilizing glass fiber filter disks (standard methods) and methods utilizing filter paper (nonstandard methods) were not reconciled in the Development Document as to how the data was evaluated. A conversion factor for nonstandard methods to standard methods of 3 to 1 was suggested for use in the evaluation of data.

The two testing techniques were discussed in the Development Document, and data for mills utilizing nonstandard methods was not used in development of the limitations. Conversion factors for nonstandard methods to standard methods range from less than 2 to more than 10 depending upon the effluent stream sampled. Thus, the Agency feels that use of a conversion factor is not applicable. The discussion of how nonstandard methods and standard methods data was evaluated has been expanded in the Development Document.

(13) Two commenters stated that the limitations should be written for annual averages in order that mills which have controlled discharges can meet the limitations.

The Agency recognizes that mills with controlled discharges, based on receiving water quality, generally have large fluctuations in effluent flow rates, such as no discharge during a period of time when receiving water flows were low and then

possibly double or triple the average discharge rate when receiving water flows were high. These particular mills will have effluent limitations which will be equivalent to the limitations but will not necessarily establish the same daily and 30 day limitations.

(14) Two commenters stated that foam control will probably not be needed after the installation of the internal and external controls and thus, the requirement for foam control should be removed from the limitations.

The Agency concurs that foam control will probably not be required after the internal and external controls are installed. However, foam control is recommended for the mills that could possibly still have a foam problem. It is emphasized that the technologies in the Development Document are not limitation requirements but are technologies identified as capable of achieving the limitations.

(15) One commenter felt that additional subcategories should be added for small mills. Suggestions were provided for what constitutes a small mill and how the limitations should be increased for small mills.

In developing the subcategories, many factors were evaluated as possible bases for establishing subcategories. One of these factors was the size of mills. The Agency concluded that size of mills was not a significant factor for subcategorization because the waste water characteristics and control technologies are independent of plant size.

(16) One commenter felt that the temperature variance should be removed, as mills should select and design pollution control technology for the geographical location and climatic conditions.

The Agency concurs with the concept of selection and design of pollution control technology for the specific geographical location and accompanying climatic conditions. The temperature variance has been removed, and the regulations have been revised to reflect the seasonal effects upon effluent qualities resulting from the pollution control technologies installed at mills located in Northern climates.

(17) Several commenters stated that the proposed limitations for paperboard from waste paper do not account for the effects of the type of waste paper utilized for furnish (fibrous raw materials) upon the raw waste load. In addition to the type of furnish, it was argued that mills producing food-grade products have a significantly different raw waste load than mills producing non-food-grade products. It was suggested that the paperboard from the waste paper subcategory should be further subcategorized to account for the effects of raw material and product.

The Agency has evaluated the greatly expanded data base in order to further determine the effect of furnish and products upon final effluent quality. The Agency agrees that furnish and product do affect the raw waste characteristics. However, the data as presented in the Development Document shows that mills

can achieve quality final effluents independent of raw waste load. The limitations were revised based upon the expanded data base.

(18) Several commenters stated that there are other methods of solid waste disposal presently being practiced which are just as acceptable as sanitary landfills. Thus, the requirement of sanitary landfills should be removed from the limitations.

The Agency emphasizes that the technology of sanitary landfills is an option for solid wastes disposal and not a requirement.

(19) It was alleged that the limitations for color removal do not appear to be workable since there is no direct linear relationship between color units and color mass.

The Agency concurs that there is no direct linear relationship between color units and color mass. However, in order for the color limitations to be related to mill production, the Agency defined, for purposes of implementing the color limitations, the following standard relationship used by several other countries: 1 mg/l equals 1 color unit.

(20) Several comments were made that the variabilities of raw waste load were not considered in the development of the limitations.

The BPCTCA limitations are based upon actual mill operating data including both raw waste and final effluent data. The Agency determined that the effects of variations in raw waste load are upon the treatment system and the quality of the final effluent. Thus, the effects of raw waste variability were considered in the development of the limitations through consideration of variations in final effluent quality.

(21) Many commenters stated that the limitations for TSS should be removed or replaced by a settleable solids limitation as the suspended solids in the final effluent from pulp and paper mill biological treatment systems are biological organisms generated during treatment for the removal of BOD and not the fibrous materials contained in mill raw wastes. It was argued that the fibrous materials in the raw waste are removed by primary treatment and that the biological suspended solids in the final effluent from the biological treatment system characteristically do not settle. It was suggested that since the biological solids do not settle and cause problems of sludge beds in receiving wastes and no harm is caused to the environment other than an exertion of BOD which is regulated by the BOD5 limitations, the TSS limitation be removed or replaced by a settleable solids limitation which would measure the potential for sludge bed buildup.

The Agency believes that the TSS in final effluents from pulp and paper mill biological treatment systems are harmful to aquatic environments. The Agency concurs that the fibrous materials in the raw waste should settle out in a well designed and operated primary treatment system. As discussed in Section VI of the Development Document, the

Agency believes that the TSS from pulp and paper mill biological treatment systems have the following detrimental effects upon receiving water environments: (1) increases in the turbidity of the receiving water resulting in reduced light transmission and accompanying effects, such as reduced photosynthesis, (2) aesthetic effects, (3) settling of suspended solids to the bottom of receiving waters, and (4) exertion of BOD by the biological suspended solids. The BOD exerted by the biological suspended solids is only partially measured by the BOD5 test, as the BOD20 test would be more descriptive of the oxygen consuming effects. Thus, the Agency believes that suspended solids from pulp and paper mill biological treatment systems are pollutants which cause detrimental receiving water effects. Therefore, the TSS limitation was not removed from the regulations.

(22) Many comments were received that stated that the technology of lime treatment for removal of color has not been fully demonstrated. The commenters stated that a large number of operating problems continue to give difficulty in achieving adequate consistent color removal levels and that specifically, increases of color following color removal during biological treatment are being experienced at two mills employing color removal systems. It was suggested that since the lime treatment technology is still developing, the color removal limitations for new sources should be removed.

The Agency believes that the lime treatment process has been satisfactorily demonstrated and can be applied to new mills. It is the Agency's judgment that the operating problems being experienced by the two full-scale installations are inherent to the specific mills involved. For example, the problem of increases in color levels through the biological treatment systems are not indicative of problems of the lime treatment technology. These are a result of the specific biological systems involved, as color is being leached into the waste water from the ground. In addition, the Agency feels that many of the operating problems can be solved by new mills by being able to design the color removal system into the total mill design rather than adding on the unit operation to an existing mill.

(23) Several commenters stated that the BATEA limitations for color removal should be increased as the mills presently using the recommended lime treatment cannot meet the limitations. Suggestions for increased BATEA limitations were made and data was provided.

It is the Agency's judgment that many of the operating problems of the color removal systems presently in use will be solved before 1983. In addition, mills presently using the color removal systems are not expected to meet the limitations until 1983 by which time the waste water flows will have been reduced through in-plant controls. The reduction in waste water flows will allow the mills to meet the limitations by a reduction in total color discharged per day.

The additional information and data submitted to the Agency during the comment period substantiated the proposed regulations:

(24) It was suggested by several commenters that the color limitation should be removed from the regulations as color has not been established as a pollutant and its inclusion for BATEA and NSPS is not justified.

As discussed in Section VI of the Development Document, the Agency believes that color is a major pollutant parameter and has the following detrimental effects: (1) Color in receiving waters retards sunlight transmission and interferes with photosynthesis thereby reducing productivity of the aquatic community; (2) color alters the natural stream color and is thereby aesthetically displeasing; (3) color has a detrimental effect upon downstream municipal and industrial water users, as color, even when not visually apparent (i.e. turbid streams), must be removed before use in municipal and industrial water supplies; (4) color bodies complex with metal ions, such as iron or copper, forming tar-like residues which remove metals from the stock available to stream organisms for normal metabolism; and the complexes can have direct inhibitory effects on some of the lower scale of organisms in the aquatic community; (5) color is an indicator of potentially inhibitory compounds discharged to the aquatic environment; and (6) color in receiving waters affects fish productivity and fish movements. Therefore, the limitations for color for BATEA and NSPS were not removed from the regulations as the Agency believes that color is a major pollutant parameter.

(25) Two commenters felt that the costs of color removal did not consider many of the engineering problems associated with the application of the massive lime technology.

The Agency is recommending minimum lime treatment for color removal for BATEA limitations and NSPS for two subcategories. The color limitations were based upon the minimum lime process which has been demonstrated by two mills in full-scale. The minimum lime process is less complex than the massive lime process and thus has fewer engineering problems. Therefore, the costs for color removal were for the minimum lime process and not for the massive lime process.

(26) One commenter stated that the NSSC—sodium base limitations were based upon an atypical mill, as approximately one-third of its furnish (fibrous raw material) is waste paper and the waste cooking liquor is spray irrigated. It was argued that these two factors result in an atypical low raw waste load and that the limitations should be based on mills which use NSSC furnish and which have recovery (or incineration) for disposal of their waste liquors.

The Agency concurs that the amount of waste paper used as furnish and the method of liquor disposal have effects upon the raw waste load. Additional data

provided to the Agency by individual mills and the pulp and paper technical association has been evaluated and the limitations have been revised to reflect the effect of the type furnish and the waste liquor disposal methods upon raw waste load.

(27) Four comments were received that stated that the recommended technology for mills to achieve the BPCTCA limitations will require mills to install both internal and external controls. It was argued that, in effect, this pushes the 1983 limitations up to 1977 because the intent of the Act was to emphasize external treatment to meet the 1977 limitations and to emphasize internal controls in 1983. It was also suggested that since the 1983 internal technologies are essentially being required in 1977, the costs of achieving the BPCTCA limitations will be substantially higher and the economic impact may be significant.

It is the opinion of the Agency that the Act does not preclude considering some in-plant control changes as part of BPCTCA. Section 304(b) (1) (B) includes consideration of "the process employed" and "process changes" as part of the determination of BPCTCA. Where an in-plant change can be implemented by 1977 and meets the other requirements of section 304(b) (1), there is no reason to differentiate such control measure from any other control measure or practice imposed as part of BPCTCA. The in-plant changes which have been identified as available in 1977 are practices which are in common use in the industry.

(28) One comment was made that the construction schedules for treatment systems presented in the proposed Development Document do not consider many factors, such as review and negotiation, increasingly slow equipment deliveries and the effects of climate upon construction.

The original intent of the inclusion of construction schedules was not that they be specific rules for construction, but that they be guides as to that which can be done and approximately the amount of time that might be involved. The several factors mentioned were considered but the prediction of factors such as increasingly slow equipment deliveries is difficult to foresee.

(29) Two commenters stated that the limitations should be written as net pollutants and mills should be given credit for pollutants in their raw water supply.

The effluent limitations have generally been developed on a gross or absolute basis. However, the Agency recognizes that in certain instances pollutants will be present in navigable waters which supply a plant's intake water in significant concentrations which may not be removed to the levels specified in the limitations by the application of treatment technology contemplated by BPCTCA.

Accordingly, the Agency is currently developing amendments to its NPDES permit regulations (40 CFR Part 125) which will specify the situations in which the Regional Administrator may allow

a credit for such pollutants. The regulations will be proposed for public comment in the near future.

(30) Several commenters stated that the Agency should provide a range of effluent limitations instead of a single limitation, as the range would allow the Regional Administrators to determine the appropriate limitation for each mill depending upon the specific conditions at the mills.

The present limitations take differences within an industry into account through subcategorization, rather than by use of ranges of numbers to be varied at the discretion of the office issuing permits. The 28 industries noted in Section 306 of the Act, for example, have already broken some of the broad industrial groups into subgroups such as the chemical industry into inorganic chemicals, organic chemicals, plastics and synthetics, petrochemicals, soaps and detergents, fertilizers, and rubber. The pulp and paper industry has been broken into 5 initial subcategories with 15 sets of limitations. In addition, a second phase of guideline issuance will establish additional subcategories.

(31) Several commenters stated that the exemplary mills as identified in the Development Document were not typical of the mills in each specific subcategory. Analyses of nearly each exemplary mill was provided showing how each mill was atypical. The factors presented which were discussed as atypical operations included the following: external treatment systems designed specifically to meet receiving water quality standards; and low raw waste loads resulting from extensive internal controls.

The Agency contends that the internal and external treatment systems in question which may have been installed to meet water quality requirements in receiving waters are representative of BPCTCA. These systems are in common use which indicates that the technologies are practicable as mills having installed these systems have not been significantly economically impacted. The Agency believes that these systems are normal internal controls and the external systems are achieving normal pollutant reductions. The reasons why the particular controls were installed is not relevant to determination of their availability.

(32) One commenter said that there was no real analysis of the costs of air and water pollution control and the benefits derived.

The limitations, as mandated by the "Act", are technologically based, and benefits are expressed in terms of effluent reduction. Although air pollution control costs were not quantified, consideration was given to this factor when the economic impact was assessed.

(33) One commenter said that while pollution control cost information was provided for a single model mill for each subcategory, costs tend to be higher for smaller mills, and their adverse economics of scale effects should be considered in the economic analysis.

The economic analysis pointed out that costs tended to increase for smaller mills.



As a result, the economic impact analysis focused on the smaller mills in each subcategory. The economic impact was not significant in that no plant closures and loss of production capacity were indicated for unbleached kraft mills; 2.5%-4.2% of production capacity would possibly close for NSSC mills, and 1.7%-2.5% for paperboard from waste paper mills.

(34) Several commenters stated that the costs for pollution control presented in the Development Document and in the Economic Analysis are expressed in 1971 dollars and that these 1971 costs do not reflect the actual costs to the industry in 1977 or 1983. Therefore, the economic impact is understated.

The economic analysis has assumed that the cost of pollution control will increase at a rate similar to the general inflation rate. Therefore, the annual cost of pollution control as a percent of sales, or the capital cost as a percent of plant investment, is expected to be relatively stable. As a result, the economic analysis used these relatively stable parameters for assessing economic impact in 1977 and 1983.

(35) Two commenters stated that the cost of land disposal, as presented in the Appendix of the Economic Analysis, is understated.

The economic impact analysis is essentially an update of a 1971 study which was conducted for the Council on Environmental Quality. The impact projections made in the 1971 study were revised to reflect the actual limitations and such items as the associated costs, the current industry segment status and current projections regarding capacity, and demand. For the purpose of convenience to the reader of the economic analysis, the 1971 study was included in the Appendix. The cost estimates in the Appendix were not those made in the economic analysis. In the case of sludge disposal, for the conditions stated by the commenter, the costs would be fifty percent greater than those shown in the Appendix. Further, the costs of sludge disposal are a small component of the annual costs and their variability does not affect the conclusions of the analysis.

(36) The comment was made that the pollution control costs do not include a reasonable return on investment.

The pollution control cost estimates included the cost of capital which implicitly reflect a minimum required return on investment. Because the cost of capital used was the cost of debt, the actual cost of capital to the industry may have been understated. However, the resulting difference in pollution control costs are small and would not affect the conclusions of the economic analysis.

(b) Revision to the proposed regulation prior to promulgation.

As a result of public comments, additional technical data, and continuing review of the proposed regulations by the EPA, the following changes have been made in the regulation.

(1) The temperature variance was removed from the regulations because of

the difficulty in implementing the temperature variance in the regulation of NPDES permits. The regulations were revised to reflect the seasonality of effluent qualities by utilizing the maximum month of pollutant discharge by exemplary mills.

(2) The definition of production was changed from the maximum seven days production to the annual average production. This change is consistent with the production basis which was used in the development of the limitations.

(3) The technology for suspended solids reduction by mixed-media filtration has been removed from the technologies identified for new sources. The limitations were revised to reflect the removal of mixed-media filtration and has resulted in less stringent limitations for new sources:

(4) The variance for hydraulic barking has been removed due to the trend in the industry to discontinue this processing method. The Agency identified only one mill currently using the process in these subcategories.

(5) Reevaluation of the original data base and evaluation of data received during the comment period in conjunction with removal of the temperature variance resulted in revised limitations for all subcategories.

(6) Through evaluation of the expanded data base and examination of additional information developed within EPA, it was determined that the previously identified exemplary mill in the ammonia base NSSC subcategory did not meet the requirements of BPCTCA and thus, the limitations were revised to reflect the application of BPCTCA.

(7) Section 304(b)(1)(B) of the Act provides for "guidelines" to implement the uniform national standards of section 301(b)(1)(A). Thus Congress recognized that some flexibility was necessary in order to take into account the complexity of the industrial world with respect to the practicability of pollution control technology. In conformity with the Congressional intent and in recognition of the possible failure of these regulations to account for all factors bearing on the practicability of control technology, it was concluded that some provision was needed to authorize flexibility in the strict application of the limitations contained in the regulation where required by special circumstances applicable to individual dischargers. Accordingly, a provision allowing flexibility in the application of the limitations representing best practicable control technology currently available has been added to each subpart, to account for special circumstances that may not have been adequately accounted for when these regulations were developed.

(c) Economic impact.

The changes that were made to the proposed regulations have resulted in revised limitations. The costs associated with these limitations have not changed substantially and therefore the conclusions of the economic analysis remain unchanged. However, in the case of the NSSC subcategories, the availability of

additional information has resulted in the reduction of potential mill closures from six to three.

Overall, the projected impacts of BPCTCA include:

3-6% price increases;

7-10 potential closures out of 188 mills, representing 1-1.4% of capacity; and

810-1,250 potential unemployed persons representing 1.1-1.6% of total employment for these mills.

Industry growth will not be significantly affected by capital requirements associated with these effluent limitations. Expected increased prices and slow growth in capacity for the next few years is primarily a result of the business cycle and the last several years of price controls. With projected higher prices and profitability, the industry will be able to raise sufficient capital for needed expansion.

(d) Cost-benefit analysis.

The detrimental effects of the constituents of waste waters now discharged by point sources within the unbleached kraft, semi-chemical, and paperboard segments of the pulp, paper, and paperboard mills manufacturing point source category are discussed in Section VI of the report entitled "Development Document for Effluent Limitations Guidelines for the Unbleached Kraft and Semi-Chemical Pulp Manufacturing Segment of the Pulp, Paper, and Paperboard Mills Point Source Category" (May 1974). It is not feasible to quantify in economic terms, particularly on a national basis, the costs resulting from the discharge of these pollutants to our Nation's waterways. Nevertheless, as indicated in Section VI, the pollutants discharged have substantial and damaging impacts on the quality of water and therefore on its capacity to support healthy populations of wildlife, fish and other aquatic wildlife and on its suitability for industrial, recreational and drinking water supply uses.

The total cost of implementing the effluent limitations includes the direct capital and operating costs of the pollution control technology employed to achieve compliance and the indirect economic and environmental costs identified in Section VIII and in the supplementary report entitled "Economic Analysis of Proposed Effluent Guidelines PULP, PAPER, AND PAPERBOARD INDUSTRY" (September 1973). Implementing the effluent limitations guidelines will substantially reduce the environmental harm which would otherwise be attributable to the continued discharge of polluted waste waters from existing and newly constructed plants in the pulp, paper, and paperboard industry. The Agency believes that the benefits of thus reducing the pollutants discharged justify the associated costs which, though substantial in absolute terms, represent a relatively small percentage of the total capital investment in the industry.

(e) Solid waste control.

Solid waste control must be considered. The waterborne wastes from the pulp, paper, and paperboard industry

may contain a considerable volume of metals in various forms as a part of the suspended solids pollutant. Best practicable control technology and best available control technology, as they are known today, require disposal of the pollutants removed from waste waters in this industry in the form of solid wastes and liquid concentrates. In some cases these are nonhazardous substances requiring only minimal custodial care. However, some constituents may be hazardous and may require special consideration. In order to ensure long-term protection of the environment from these hazardous or harmful constituents, special consideration 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 precautions (e.g., impervious 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 the legal jurisdiction in which the site is located.

(f) Publication of information on processes, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants.

In conformance with the requirements of Section 304(c) of the Act, a manual entitled, "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Unbleached Kraft and Semi-Chemical Pulp Manufacturing Segment of the Pulp, Paper, and Paperboard Point Source Category," is being published and will be available for purchase from the Government Printing Office, Washington, D.C. 20402 for a nominal fee:

(g) Final rulemaking:

In consideration of the foregoing, 40 CFR Chapter I, Subchapter N is hereby amended by adding a new Part 430, Pulp, Paper, and Paperboard Manufacturing, Point Source Category, to read as set forth below. An order of the Federal District Court for the District of Columbia entered in *NEDC v. Train* (Civ. No. 1609-73) on November 27, 1973, required that the Administrator sign final effluent limitations guidelines for this industry category by March 22, 1974. That order was subsequently modified on March 14, 1974, and the date for signing extended until May 6, 1974. Thereafter, on March 15, 1974, the District Court ordered that the effective date for effluent limitations guidelines established by its November 27 order remain applicable and not be affected by the extension of the publication date. The effective date for effluent limitations guidelines for this industry established by the Court's November 27 order is May 21, 1974. Accordingly, good cause is found for the final regulation promulgated as set forth below to be effective upon publication in the FEDERAL REGISTER.

Dated: May 17, 1974.

JOHN QUARLES,  
Acting Administrator.

Subpart A—Unbleached Kraft Subcategory

- Sec. 430.10 Applicability; description of the unbleached kraft subcategory.
- 430.11 Specialized definitions.
- 430.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 430.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 430.14 Reserved.
- 430.15 Standards of performance for new sources.
- 430.16 Pretreatment standards for new sources.

Subpart B—Sodium Based Neutral Sulfite Semi-Chemical Subcategory

- 430.20 Applicability; description of the sodium based neutral sulfite semi-chemical subcategory.
- 430.21 Specialized definitions.
- 430.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 430.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 430.24 Reserved.
- 430.25 Standards of performance for new sources.
- 430.26 Pretreatment standards for new sources.

Subpart C—Ammonia Base Neutral Sulfite Semi-Chemical Subcategory

- 430.30 Applicability; description of the ammonia base neutral sulfite semi-chemical subcategory.
- 430.31 Specialized definitions.
- 430.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 430.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 430.34 Reserved.
- 430.35 Standards of performance for new sources.
- 430.36 Pretreatment standards for new sources.

Subpart D—Unbleached Kraft—Neutral Sulfite Semi-Chemical (Cross Recovery) Subcategory

- 430.40 Applicability; description of the unbleached kraft—neutral sulfite semi-chemical (cross recovery) subcategory.
- 430.41 Specialized definitions.
- 430.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Sec. 430.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

- 430.44 Reserved.
- 430.45 Standards of performance for new sources.
- 430.46 Pretreatment standards for new sources.

Subpart E—Paperboard From Waste Paper Subcategory

- 430.50 Applicability; description of the paperboard from waste paper subcategory.
- 430.51 Specialized definitions.
- 430.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 430.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 430.54 Reserved.
- 430.55 Standards of performance for new sources.
- 430.56 Pretreatment standards for new sources.

AUTHORITY: Secs. 301, 304 (b) and (c), 306 (b) and (c) and 307(c) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c), and 1317(c)) 88 Stat 816 et seq.; Pub L. 92-500.

Subpart A—Unbleached Kraft Subcategory  
§ 430.10 Applicability; description of the unbleached kraft subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of pulp and paper by unbleached kraft mills. When a plant is subject to effluent limitations covering more than one subcategory, the discharge limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory.

§ 430.11 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40-CFR Part 401 shall apply to this subpart.

(b) Color shall mean that color as measured by the testing method presented in the National Council for Air and Stream Improvement, (Inc.) "Technical Bulletin 253," December 1971. Color units are to be assumed equal to mg/l.

(c) Total suspended-nonfilterable solids (TSS) shall mean TSS as measured by the technique utilizing glass fiber disks as specified in "Standard Methods for the Examination of Water and Wastewater" (13th Edition).

(d) Production shall be defined as the annual average off the machine (air-dry tons).

§ 430.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account

all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry sub-categorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

tion, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
BOD <sub>5</sub> .....	2.7	1.35
TSS.....	3.7	1.85
Color.....	15.0	10.0
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per ton of product)	
BOD <sub>5</sub> .....	5.4	2.7
TSS.....	7.4	3.7
Color.....	30.0	20.0
pH.....	Within the range 6.0 to 9.0.	

§ 430.14 Reserved.

§ 430.15 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
BOD <sub>5</sub> .....	3.1	1.55
TSS.....	7.5	3.75
Color.....	15.0	10.0
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per ton of product)	
BOD <sub>5</sub> .....	6.2	3.1
TSS.....	15.0	7.5
Color.....	30.0	20.0
pH.....	Within the range 6.0 to 9.0.	

§ 430.16 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the unbleached Kraft subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 430.15; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the

case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart B—Sodium Based Neutral Sulfite Semi-Chemical Subcategory

§ 430.20 Applicability; description of the sodium based neutral sulfite semi-chemical subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of pulp and paper by sodium base neutral sulfite semi-chemical mills. When a plant is subject to effluent limitations covering more than one subcategory, the discharge limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory.

§ 430.21 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) Color shall mean that color as measured by the testing method presented in the National Council for Air and Stream Improvement, (Inc.) "Technical Bulletin 253," December 1971. Color units are to be assumed equal to mg/l.

(c) Total suspended nonfilterable solids (TSS) shall mean TSS as measured by the technique utilizing glass fiber disks as specified in "Standard Methods for the Examination of Water and Wastewater" (13th Edition).

(d) Production shall be defined as the annual average off the machine (air-dry tons).

§ 430.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) correspondingly reduced in stringency for that pollutant.

Subpart B—Sodium Based Neutral Sulfite Semi-Chemical Subcategory

§ 430.20 Applicability; description of the sodium based neutral sulfite semi-chemical subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of pulp and paper by sodium base neutral sulfite semi-chemical mills. When a plant is subject to effluent limitations covering more than one subcategory, the discharge limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory.

§ 430.21 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and meth-

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
BOD <sub>5</sub> .....	5.6	2.8
TSS.....	12.0	6.0
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per ton of product)	
BOD <sub>5</sub> .....	11.2	5.6
TSS.....	24.0	12.0
pH.....	Within the range 6.0 to 9.0.	

§ 430.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section,

ods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) Color shall mean that color as measured by the testing method presented in the National Council for Air and Stream Improvement, (Inc.) "Technical Bulletin 253," December 1971. Color units are to be assumed equal to mg/l.

(c) Total suspended nonfilterable solids (TSS) shall mean TSS as measured by the technique utilizing glass fiber disks as specified in "Standard Methods for the Examination of Water and Wastewater" (13th Edition).

(d) Production shall be defined as the annual average off the machine (air-dry tons).

**§ 430.22 Effluent limitations guidelines** representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	8.7	4.25
TSS.....	11.0	5.5
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	17.4	8.7
TSS.....	22.0	11.0
pH.....	Within the range 6.0 to 9.0.	

**§ 430.23 Effluent limitations guidelines** representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	4.5	2.25
TSS.....	5.0	2.5
Color.....	75 percent removal.	
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	9.0	4.5
TSS.....	10.0	5.0
Color.....	75 percent removal.	
pH.....	Within the range 6.0 to 9.0.	

**§ 430.24 Reserved.**

**§ 430.25 Standards of performance for new sources.**

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	5.2	2.6
TSS.....	7.7	3.85
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	10.4	5.2
TSS.....	15.4	7.7
pH.....	Within the range 6.0 to 9.0.	

**§ 430.26 Pretreatment standards for new sources.**

The pretreatment standards under section 307(c) of the Act for a source within the sodium based neutral sulfite semi-chemical subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 430.25; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

**Subpart C—Ammonia Base Neutral Sulfite Semi-Chemical Subcategory**

**§ 430.30 Applicability; description of the ammonia base neutral sulfite semi-chemical subcategory.**

The provisions of this subpart are applicable to discharges resulting from the production of pulp and paper by ammonia base neutral sulfite semi-chemical mills. When a plant is subject to effluent limitations covering more than one subcategory, the discharge limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory.

**§ 430.31 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) Color shall mean that color as measured by the testing method presented in the National Council for Air and Stream Improvement, (Inc.) "Technical Bulletin 253," December 1971. Color units are to be assumed equal to mg/l.

(c) Total suspended nonfilterable solids (TSS) shall mean TSS as measured by the technique utilizing glass fiber disks as specified in "Standard Methods for the Examination of Water and Wastewater" (13th Edition).

(d) Production shall be defined as the annual average off the machine (air-dry tons).

**§ 430.32 Effluent limitations guidelines** representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to



factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitation have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the bests practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
BOD <sub>5</sub> .....	8.0	4.0
TSS.....	10.0	5.0
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per ton of product)	
BOD <sub>5</sub> .....	16.0	8.0
TSS.....	20.0	10.0
pH.....	Within the range 6.0 to 9.0.	

§ 430.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of the pollutants or pollutant properties, controlled by this section, which may be

discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
BOD <sub>5</sub> .....	6.4	3.2
TSS.....	5.2	2.6
Color.....	75 percent removal.	
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per ton of product)	
BOD <sub>5</sub> .....	12.8	6.4
TSS.....	10.4	5.2
Color.....	75 percent removal.	
pH.....	Within the range 6.0 to 9.0.	

§ 430.34 Reserved.

§ 430.35 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
BOD <sub>5</sub> .....	7.5	3.75
TSS.....	7.5	3.75
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per ton of product)	
BOD <sub>5</sub> .....	15.0	7.5
TSS.....	15.0	7.5
pH.....	Within the range 6.0 to 9.0.	

§ 430.36 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the ammonia base neutral sulfite semi-chemical subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 430.35: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart D—Unbleached Kraft—Neutral Sulfite Semi-Chemical (Cross Recovery) Subcategory

§ 430.40 Applicability; description of the unbleached kraft—neutral sulfite semi-chemical (cross recovery) subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of pulp and paper by combined unbleached kraft and neutral sulfite semi-chemical (NSSC) mills, where-in the spent NSSC cooking liquor is burned within the unbleached kraft chemical recovery system. When a plant is subject to effluent limitations covering more than one subcategory, the discharge limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory.

§ 430.41 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) Color shall mean that color as measured by the testing method presented in the National Council for Air and Stream Improvement, (Inc.) "Technical Bulletin 253," December 1971. Color units are to be assumed equal to mg/l.

(c) Total suspended nonfilterable solids (TSS) shall mean TSS as measured by the technique utilizing glass fiber disks as specified in "Standard Methods for the Examination of Water and Wastewater" (13th Edition).

(d) Production shall be defined as the annual average off the machine (air-dry tons).

§ 430.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors

are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent limitations		
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	8.0	4.0
TSS.....	12.5	6.25
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	16.0	8.0
TSS.....	25.0	12.5
pH.....	Within the range 6.0 to 9.0.	

**§ 430.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent limitations		
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	3.2	1.6
TSS.....	4.2	2.1
Color.....	25.0	12.5
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	6.4	3.2
TSS.....	8.4	4.2
Color.....	37.5	25.0
pH.....	Within the range 6.0 to 9.0.	

**§ 430.44 Reserved.**

**§ 430.45 Standards of performance for new sources.**

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	3.8	1.9
TSS.....	8.0	4.0
Color.....	25.0	12.5
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	7.6	3.8
TSS.....	16.0	8.0
Color.....	37.5	25.0
pH.....	Within the range 6.0 to 9.0.	

**§ 430.46 Pretreatment standards for new sources.**

The pretreatment standards under section 307(c) of the Act for a source within the unbleached kraft—neutral sulfite semi-chemical (cross recovery) subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 430.45: *Provided*, That if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

**Subpart E—Paperboard From Waste Paper Subcategory**

**§ 430.50 Applicability; description of the paperboard from waste paper subcategory.**

The provisions of this subpart are applicable to discharges resulting from the production of paperboard from waste paper. When a plant is subject to effluent limitations covering more than one subcategory, the discharge limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory.

**§ 430.51 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) Total suspended nonfilterable solids (TSS) shall mean TSS as measured by the technique utilizing glass fiber disks as specified in "Standard Methods for the Examination of Water and Wastewater" (13th Edition).

(c) Production shall be defined as the annual average off the machine (air-dry tons).

**§ 430.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

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Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	3.0	1.5
TSS.....	5.0	2.5
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	6.0	3.0
TSS.....	10.0	5.0
pH.....	Within the range 6.0 to 9.0.	

§ 430.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms) per 1,000 kg of product		
BOD <sub>5</sub> .....	1.3	0.65
TSS.....	1.6	.8
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	2.6	1.3
TSS.....	3.2	1.6
pH.....	Within the range 6.0 to 9.0.	

§ 430.54 Reserved.

§ 430.55 Standards of performance for new sources.

The following standards of performance establish the quantity or quality

of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
BOD <sub>5</sub> .....	1.5	0.75
TSS.....	4.0	2.0
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per ton of product)		
BOD <sub>5</sub> .....	3.0	1.5
TSS.....	8.0	4.0
pH.....	Within the range 6.0 to 9.0.	

§ 430.56 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the paperboard from waste paper subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR, Part 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 430.55; *Provided*, That if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

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ENVIRONMENTAL PROTECTION  
AGENCY

[ 40 CFR Part 430 ]

PULP, PAPER, AND PAPERBOARD POINT  
SOURCE CATEGORY

Proposed Application of Effluent Limitations Guidelines for Existing Sources to Pretreatment Standards for Incompatible Pollutants

Notice is hereby given pursuant to sections 301, 304 and 307(b) of the Federal Water Pollution Control Act, as amended (the Act); 33 U.S.C. 1251, 1311, 1314 and 1317(b); 86 Stat. 816 et seq.; Pub. L. 92-500, that the proposed regulation set forth below concerns the application of effluent limitations guidelines for existing sources to pretreatment standards for incompatible pollutants. The proposal will amend 40 CFR Part 430—Pulp, Paper, and Paperboard Manufacturing Point Source Category, establishing for each subcategory therein the extent of application of effluent limitations guidelines to existing sources which discharge to publicly owned treatment works. The regulation is intended to be complementary to the general regulation for pretreatment standards set forth at 40 CFR Part 128. The general regulation was proposed July 19, 1973 (38 FR 19236), and published in final form on November 8, 1973 (38 FR 30982).

The proposed regulation is also intended to supplement a final regulation being simultaneously promulgated by the Environmental Protection Agency (EPA or Agency) which provides effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources within the unbleached kraft, sodium base neutral sulfite semi-chemical, ammonia base neutral sulfite semi-chemical, unbleached kraft—neutral sulfite semi-chemical (cross recovery), and paperboard from waste paper subcategories of the pulp, paper, and paperboard point source category. The latter regulation applies to the portion of a discharge which is directed to the navigable waters. The regulation proposed below applies to users of publicly owned treatment works which fall within the description of the point source category to which the guidelines and standards (40 CFR Part 430) promulgated simultaneously apply. However, the proposed regulation applies to the introduction of incompatible pollutants which are directed into a publicly owned treatment works, rather than to discharges of pollutants to navigable waters.

The general pretreatment standard divides pollutants discharged by users of publicly owned treatment works into two broad categories: "compatible" and "incompatible." Compatible pollutants are generally not subject to pretreatment standards. (See 40 CFR 128.110 (State or local law) and 40 CFR 128.131 (Prohibited wastes) for requirements which may be applicable to compatible pollutants). Incompatible pollutants are subject to pretreatment standards as pro-

vided in 40 CFR 128.133, which provides as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry not subject to section 307(c) of the Act shall be, for sources within the corresponding industrial or commercial category, that established by a promulgated effluent limitations guidelines defining best practicable control technology currently available pursuant to sections 301(b) and 304(b) of the Act; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant; *And provided further*, That when the effluent limitations guidelines for each industry is promulgated, a separate provision will be proposed concerning the application of such guidelines to pretreatment. (Emphases added).

The regulation proposed below is intended to implement that portion of § 128.133, above, requiring that a separate provision be made stating the application to pretreatment standards of effluent limitations guidelines based upon best practicable control technology currently available.

Questions were raised during the public comment period on the proposed general pretreatment standard (40 CFR Part 128) about the propriety of applying a standard based upon best practicable control technology currently available to all plants subject to pretreatment standards. In general, EPA believes the analysis supporting the effluent limitations guidelines is adequate to make a determination regarding the application of those standards to users of publicly owned treatment works. However, to ensure that those standards are appropriate in all cases, EPA now seeks additional comments focusing upon the application of effluent limitations guidelines to users of publicly owned treatment works.

Sections 430.15, 430.25, 430.35, 430.45, and 430.55 of the proposed regulation for point sources within the unbleached kraft, sodium base neutral sulfite semi-chemical, ammonia base neutral sulfite semi-chemical, unbleached kraft—neutral sulfite semi-chemical (cross recovery), and paperboard from waste paper subcategories (January 15, 1974; 39 FR 1908), contained the proposed pretreatment standard for new sources. The regulation promulgated simultaneously herewith contains §§ 430.16, 430.26, 430.36, 430.46, and 430.56 which state the applicability of standards of performance for purposes of pretreatment standard for new sources.

A preliminary Development Document was made available to the public at approximately the time of publication of the notice of proposed rulemaking and the final Development Document entitled "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Unbleached Kraft and Semi-Chemical

Pulp Segment of the Pulp, Paper and Paperboard Mills Point Source Category" is now being published. The economic analysis report entitled "Economic Analysis of Proposed Effluent Guidelines, Pulp, Paper and Paperboard Industry" (September 1973) was made available at the time of proposal. Copies of the final Development Document and economic analysis report will continue to be maintained for inspection and copying during the comment period at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, S.W., Washington, D.C. Copies will also be available for inspection at EPA regional offices and at State water pollution control agency offices. Copies of the Development Document may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Copies of the economic analysis report will be available for purchase through the National Technical Information Service, Springfield, Virginia 22151.

On June 14, 1973, the Agency published procedures designed to insure that, when certain major standards, regulations, and guidelines are proposed, an explanation of their basis, purpose and environmental effects is made available to the public. (38 FR 15653). The procedures are applicable to major standards, regulations and guidelines which are proposed on or after December 31, 1973, and which either prescribe national standards of environmental quality or require national emission, effluent or performance standards or limitations.

The Agency determined to implement these procedures in order to insure that the public was provided with background information to assist it in commenting on the merits of a proposed action. In brief, the procedures call for the Agency to make public the information available to it delineating the major environmental effects of a proposed action, to discuss the pertinent nonenvironmental factors affecting the decision, and to explain the viable options available to it and the reasons for the option selected.

The procedures contemplate publication of this information in the FEDERAL REGISTER, where this is practicable. They provide, however, that where such publication is impracticable because of the length of this material, the material may be made available in an alternate format.

The Development Document referred to above contains information available to the Agency concerning the major environmental effects of the regulation proposed below. The information includes: (1) The identification of pollutants present in waste waters resulting from the manufacture of pulp, paper, and paperboard, the characteristics of these pollutants, and the degree of pollutant reduction obtainable through implementation of the proposed standard; and (2) the anticipated effects on other aspects of the environment (including air, solid waste disposal and land use, and noise) of the treatment technologies available to meet the standard proposed.

The Development Document and the economic analysis report referred to above also contain information available to the Agency regarding the estimated cost and energy consumption implications of those treatment technologies and the potential effects of those costs on the price and production of pulp, paper and paperboard. The two reports exceed, in the aggregate, 100 pages in length and contain a substantial number of charts, diagrams and tables. It is clearly impracticable to publish the material contained in these documents in the FEDERAL REGISTER. To the extent possible, significant aspects of the material have been presented in summary form in the preamble to the proposed regulation containing effluent limitations guidelines, new source performance standards and pretreatment standards for new sources within the pulp, paper, and paperboard category (39 FR 1908; January 15, 1974). Additional discussion is contained in the analysis of public comments on the proposed regulation and the Agency's response to those comments. This discussion appears in the preamble to the promulgated regulation (40 CFR Part 430) which currently is being published in the rules and regulations section of the FEDERAL REGISTER.

The options available to the Agency in establishing the level of pollutant reduction obtainable through the best practicable control technology currently available, and the reasons for the particular level of reduction selected are discussed in the documents described above. In applying the effluent limitations guidelines to pretreatment standards for the introduction of incompatible pollutants into municipal systems by existing sources in the unbleached kraft, sodium base neutral sulfite semi-chemical, ammonia base neutral sulfite semi-chemical, unbleached kraft—neutral sulfite semi-chemical (cross recovery), and paperboard from waste paper subcategories, the Agency has, essentially, three options. The first is to declare that the guidelines do not apply. The second is to apply the guidelines unchanged. The third is to modify the guidelines to reflect: (1) Differences between direct dischargers and plants utilizing municipal systems which affect the practicability of the latter employing the technology available to achieve the effluent limitations guidelines; or (2) characteristics of the relevant pollutants which require higher levels of reduction (or permit less stringent levels) in order to insure that the pollutants do not interfere with the treatment works or pass through them untreated.

As described in the Development Document the waste waters from all subcategories are similar in types of pollutant contents. The pollutants are organic materials and solids. These waste water pol-

lutants are considered compatible to treatment in a municipal system, and the guidelines should not apply.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Philip B. Wisman. Comments on all aspects of the proposed regulations 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 are essential to the development of the regulations. In the event comments address the approach taken by the Agency in establishing pretreatment standards for existing sources, EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301, 304 and 307(b) of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460. The EPA information regulation, 40 CFR 2, provides that a reasonable fee may be charged for copying.

In consideration of the foregoing, it is hereby proposed that 40 CFR Part 430 be amended to add §§ 430.14, 430.24, 430.34, 430.44, and 430.54 as set forth below. All comments received within thirty days of the publication of this notice of proposed rulemaking will be considered.

Dated: May 17, 1974.

JOHN QUARLES,  
Acting Administrator.

Part 430 is proposed to be amended as follows:

Subpart A is amended by adding § 430.14 as follows:

§ 430.14 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in 40 CFR 430.12 above shall not apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

Subpart B is amended by adding § 430.24 as follows:

§ 430.24 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants

established under 40 CFR 128.133, the effluent limitations guidelines set forth in 40 CFR 430.12 above shall not apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

Subpart C is amended by adding § 430.34 as follows:

§ 430.34 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in 40 CFR 430.32 above shall not apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

Subpart D is amended by adding § 430.44 as follows:

§ 430.44 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in 40 CFR 430.42 above shall not apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

Subpart E is amended by adding § 430.54 as follows:

§ 430.54 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in 40 CFR 430.52 above shall not apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

Subpart F is amended by adding § 430.54 as follows:

§ 430.54 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in 40 CFR 430.52 above shall not apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

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