Title 40—Protection of the Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

SUBCHAPTER N—EFFLUENT GUIDELINES AND STANDARDS

PART 420—IRON AND STEEL MANUFACTURING POINT SOURCE CATEGORY

On February 19, 1974, notice was published in the FEDERAL REGISTER (39 FR 6484) 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 by-product coke subcategory, beehive coke subcategory, sintering subcategory, blast furnace (iron) subcategory, blast furnace (ferromanganese) subcategory, basic oxygen furnace (semiwet air pollution control methods) subcategory, basic oxygen furnace (wet air pollution control methods) subcategory, open hearth furnace subcategory, the electric arc furnace (semiwet air pollution control methods) subcategory, electric art furnace (wet air pollution control methods) subcategory, vacuum degassing subcategory, an dthe continuous casting subcategory of the iron and steel manufacturing 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 iron and steel manufacturing category of point sources, by amending 40 CFR Chapter I, Subchapter N, to add a new Part 420. 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 by-product coke subcategory, the beehive coke subcategory, the sintering subcategory, the blast furnace (iron) subcategory, the blast furnace (ferramanganese) subcategory, the basic oxygen furnace (semiwet air pollution control methods) subcategory, the basic oxygen furnace (wet air pollution control methods) subcategory, the open hearth furnace subcategory, the electric arc furnace (semiwet air pollution control methods) subcategory, electric arc furnace (wet air pollution control methods) subcategory, the vacuum degassing subcategory, and the continuous casting subcategory. 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 Steel Making Segment of the Iron and Steel Manufacturing Point Source Category" (February 1974) and (2) the document entitled "Economic Analysis of Proposed Effluent Guidelines, the Integrated Iron and Steel Industry" (February 1974). 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, in the preamble to the proposed regulation, for written comments: American Iron and Steel Institute; Ford Motor Company; Allied Chemical Corporation; National Steel Corporation; Republic Steel Corporation; Inland Steel Company; State of Colorado, Department of Public Health; State of New York, Department of Environmental Conservation; The Alabama Conservancy; Western Reserve Economic Development Agency; United States Water Resources Council; the Effluent Standards and Water Quality Information Advisory Committee; United States Steel Corporation; and the Youngstown Sheet and Tube Company.

Each of the comments received was carefully reviewed and analyzed. The following is a summary of the significant comments and the Agency's response to them.

(1) A comment was made to the effect that although the Development Document, discussion under the byproducts coke subcategory recognizes that significantly larger volumes of ammonia liquor are generated by the indirect ammonia recovery method when compared with the more widely used semi-direct ammonia recovery method, no variations from the proposed effluent limitations were permitted except for coke plants utilizing desulfurization units. The commenter recommended consideration of such a variation for coke plants which use indirect ammonia recovery methods.

The Agency has evaluated this suggestion and has concluded that the commenter has a valid point. Change No. 1 under part (b) describes the revision that has been made and the rationale.

(2) One commenter pointed out that the preamble to the proposed regulation indicated that these limitations were intended to apply only to process waste waters and not to non-contact cooling waters but that the regulation itself does not so indicate.

The applicability section of each subpart has been revised to indicate that the limitations are applicable to the process waste waters related to the operation to which the limitations apply.

(3) One commenter pointed out that while the by-product coke plant BATEA and NSPC treatment schematics indicate the use of technology to reduce total nitrogen, the guidelines as proposed limit only ammonia and can thus be met without installing all of the treatment technology indicated as the basis for the limitations.

The regulations proposed (39 FR 6497 and 6498) were based on the projected capabilities of treatment systems which provided not only for ammonia removal but also for total nitrogen reduction. The Agency believes that the full treatment as indicated in the schematics is desirable. However, the Agency does not have a suffcient data base with which to establish a total nitrogen limit at this time.

(4) One commenter suggested that the biological denitrification process could very easily convert the sulfates, from the prior sulfide oxidation step, back to sulfides in the by-product coke Alternate II treatment system.

The information available to the Agency indicates that this will not occur to any significant extent. Nevertheless it is undesirable, and in many areas prohibited, to discharge directly from an anaerobic treatment system as indicated in the by-product coke (Alternate II), open hearth, and vacuum degassing subcategory treatment schematics for the BATEA level. Accordingly, a step aerator has been added to the treatment schematics to aerate the effluent before discharge and to oxidize sulfides should they be formed.

(5) A comment was made that BOD is not a pertinent parameter in that it was developed specifically for sanitary sewage effluents and that it should be deleted.

The proposed guidelines contained a limit for BOD5 on by-product coke plant wastes. This test has been used for years to quantify the oxygen requirements of coke plant wastes and is decidedly applicable. However, on further review, the Agency has concluded that this limitation can be deleted. The guidelines contain limits on the parameters which contribute to the BOD5 (except for sulfide at the BPCTCA level which economic considerations precluded the provision of a means to control) and thus the limitation on BOD5 was concluded to be redundant.

(6) One commenter presented several frequency distribution curves on pollutant concentrations and suggested that the limits for "daily maximum" and "30 consecutive day" values for some pollutant parameters should be increased.

The Agency has re-evaluated the data available and has revised the regulation as indicated in Change No. 6.

(7) Comments were received to the effect that the proposed New Source Per-

formance Standards (NSPS) are based on the immediate use of technology which cannot be described as Best Available Demonstrated Control Technology (BADCT).

The Agency has re-evaluated the data available and has revised the regulation as indicated in Change No. 6.

(7) Comments were received to the effect that the proposed New Source Performance Standards (NSPS) are based on the immediate use of technology which cannot be described as Best Available Demonstrated Control Technology (BADCT).

The Agency has reviewed the information available and believes that the commenter has a valid point with respect to the immediate application of technology for biological denitrification. Change No. 7 describes the revision made and the rationale.

(8) Comments have been received to the effect that alkaline chlorination is an undesirable treatment technology to apply to coke plant wastes because of its tendency to increase the toxicity of the refractory organic compounds present.

This effect has been recognized and was the basis for including carbon adsorption as a part of the BATEA and NSPS treatment schematics in systems based on chlorination of by-product coke plant and blast furnace wastes. Carbon adsorption is considered to achieve its greatest effectiveness in adsorbing chlorinated organics and carbon adsorption is considered the most efficient means for the removal of same. The problem arises in that the limitations can be achieved without installing the activated carbon portion of the envisioned systems.

The use of carbon adsorption is intended as part of the treatment system of plants using alkaline chlorination. However, other means may be used to remove the chlorinated organics; or such treatment can be deleted if no problem is found to exist. The Agency does not have sufficient information with which to establish limitations on chlorinated organics at this time. A limitation may be established in the future, if necessary.

(9) A comment was received to the effect that the fluoride ion solubility exceeds the theoretical rate when carbon dioxide is present and that 30 mg/l is the best treatment attainable based on commenter's survey.

The recommended treatment technology to achieve BATEA limitations involves the addition of lime which converts any carbon dioxide in the system to calcium carbonate, keeping this potential interference from affecting the fluoride solubilities, and allowing maximum precipitation of solid calcium fluoride.

(10) One comment inferred that the flow rate of 209 l/kkg (50 gallons per ton) for the Basic Oxygen Furnace (BOF)—Wet Subcategory was developed in part from one dry system, one non-combustion off gas (OG) system which uses less water than an open hood combustion type system, and one system for which flows were estimated from design data and in which the actual flows are approximately twice design (to avoid plugging problems). Further, the commenter stated "that the water use rate on existing BOF's has to be evaluated on an individual basis * * *" The commenter followed with a listing of many factors that should be considered.

The commenter apparently did not recognize the division of BOF systems into two subcategories, i.e. those using semi-wet air pollution control methods (Subpart F) and those using wet air pollution control methods (Subpart G). Two of the five systems visited and sampled (plants R and U) were used as a basis for developing the limitations for Subpart F and three of the systems were used as a basis for developing the limitations for Subpart G.

The information in the Development Document clearly indicates that plants R and U are semi-wet systems and should be evaluated separately relative to the "no discharge" limitations of Subpart F. The "dry precipitator" system referred to by the commenter is a semi-wet system which was recycling water at the rate of 542 l/kkg (130 gallons per ton), but the system is operated as a closed system with no discharge.

The three wet systems studied and sampled (plants S, T, and V) included one OG system and two combustion type systems. The OG system, which supposedly uses less water, was recirculating water at the rate of 4254 l/kkg (1020 gallons per ton), i.e. a higher rate than for the other two systems. Even so, this plant was operating with a blowdown rate of 217.7 l/kkg (52.2 gallons per ton). Plant V was designed for a blowdown rate of 137.6 l/kkg (33 gallons per ton). The commenter contends that the system must be operated at twice this blowdown rate to avoid plugging problems, but other information available to the Agency indicates that the actual rate is less than 250.3 l/kkg (60 gallons per ton) and also that the plugging problems resulted not from operating the BOF scrubber portion of this multi-purpose system at the design rate, but due to problems in the other part of the system. The use of excessive blowdown to compensate for a problem from an external source does not justify this blowdown rate even for this plant, much less for all other wet BOF shops.

(11) Comments have been received to the effect that the effluent limitations guidelines should specify the net loads to be discharged rather than absolute loads.

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 guidelines 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 the pollutants present in a plant's intake waters. The regulations will be proposed for public comment in the near future.

(12) A comment was received to the effect that by-product coke plant waste water volumes (per unit of production) will be increasing in the future rather than decreasing, as the BPCTCA and BATEA limitations indicate, due to increasing restrictions on disposal of wastes by use in coke quenching and due to increased requirements for the installation of wet air pollution control methods.

The limitations were developed on the basis of the treatment of all process waste waters produced, and hence will not be affected by restrictions on the use of waste waters for coke quenching. The limitations were also developed on the basis that there would be no effluent from the coke quenching operation to be treated. The data available to the Agency indicates that the quench waters are not significantly contaminated in that use and can be recycled to extinction. Foul effluents from this operation appear to originate with the use of foul wastes as the quench medium. The limitations do not make allowance for waste waters from wet air pollution control systems, other than desulfurization units, and if such systems are developed and employed, an individual or case by case determination will need to be made as to the added waste load to allow until such time that the limitations can be revised to reflect the changing conditions.

(13) Comments were received to the effect that the recycling of blast furnace scrubber waste waters with the very limited amount of blowdown allowed would in all probability adversely affect blast furnace operations and would, therefore, not be practical.

Five iron-making blast furnace systems were sampled and studied for the purpose of developing these limitations. One of these was treating its waste waters and discharging "once through" with no attempt to recycle. The other four plants were operating recycle systems. Three of these were discharging at a rate less than the 521.4 l/kkg (125 gallons per ton) basis used in establishing the limitations and the fourth had no discharge. The latter plant could not be adequately evaluated because the company failed to supply requested data. However, the Agency believes that the other three recycle systems provide adequate verification that iron making blast furnace recycle systems can achieve the flow rates on which these limitations are based.

(14) A comment was made to the effect that the proposed limitations for sinter plants were developed from data from a plant using wet dust control methods only at the discharge end and that no limitations should be established until a study and analysis has been made of a plant which uses wet gas cleaning systems on both the windbox and the deduster.

The limitations were developed on the basis of the data from a plant which uses wet scrubbers on both operations. Confusion on this point probably resulted from the incorrect identification of figures in the Development Document.

(15) A comment was made to the effect that BATEA limitations should in-

clude a limit on total cyanides, in addition to, or in place of, a limit on only those cyanides amenable to chlorination.

Since the effluent limitations for BPCCTCA are based on demonstrated treatment technologies, and since data on the total cyanide removal capabilities of those technologies is available, such limitations could be and were developed for total cyanides.

However, the BATEA limitations are based on the destruction of only the simple or free (and most toxic) cyanides rather than total cyanides. The degree of destruction of free cyanides via alkaline chlorination and break point chlorination is known, and provides a basis for establishing limits on cyanides amenable to chlorination. The effect of these treatments upon the less toxic cyanide complexes is difficult to evaluate at this time. Additional information will be required before limitations based on total cyanides can be established for the BATEA technologies.

(16) One commenter stated that it is not explained how the data presented demonstrates that the factors of age and size have been considered and further states that the commenter believes the Agency is erroneous in concluding that these factors do not require subcategorization on this basis.

The Agency has subdivided the steel making segment primarily along operational lines because the waste water volumes and pollutant parameters vary with the type of operation being conducted. In addition, the processes reflect the age of the technology employed. Subcategorization of coke making by the older beehive and the newer by-product operations and steel making by the older open hearth and the newer basic oxygen and electric arc furnace operations is indirectly subcategorization by age.

The treatment technology to be applied is primarily a function of the pollutants present and hence is a function of the type of operation conducted. The type of pollutants present is not a function of the age or size of the operating facility. Land availability for application of the treatment technology is not a function of size or age since many new as well as old mills are limited on the area available for installation of treatment facilities and vice versa. The same can be said with respect to size. Many of the older mills have better treatment than some of the newer ones and vice versa. The treatment technologies proposed do not require large land areas and in addition alternatives are available to those facilities which do have a land availability problem.

The limitations are primarily a function of the kinds of pollutants present, the unit volume of wastes that must be discharged, and the capabilities of the applicable treatment technology. All of these factors relate to the type of operation conducted and not to the size or age of the facility.

(17) One comment was received to the effect that the limitations for sinter plants were based on only one plant because the water systems at the other plants visited were so intricate as to make separate identification of the unit raw waste and unit effluent loads from the sintering operation obscure, yet the plant used as a basis for the limitations was also intricate.

A total of four sinter plant operations were visited during the industry study. The plant used as a basis for the limitations received some input from the blast furnace system but, by comparison to the other plants, was relatively straight forward and the data was considered representative and capable of being adequately interpreted.

(18) A comment was received objecting to the large energy consumption required to provide cyanide destruction via alkaline chlorination, especially since the commenter assumed that this process is applicable only to waste streams which have been raised to elevated temperatures.

The BATEA cyanide limitations do not require additional heating of waste streams over and above the temperatures normally encountered. The one blast furnace operation surveyed which was utilizing alkaline chlorination achieved low concentrations of cyanides in the treated effluent without additional heating. Moreover, the BATEA cyanide limitation is specifically based upon cyanides amenable to chlorination, rather than total cyanides, for reasons cited above. This commenter has previously contended that chlorination is not effective in destroying complex cyanides except at elevated temperatures. This does not apply to the simple cyanides, i.e., the cyanides amenable to chlorination, to which the BATEA and NSPS limitations apply.

(19) One commenter stated that his best engineering judgment indicated that the Agency's cost estimates are one-third to one-half of the true cost of constructing the proposed facilities.

The costs likely to be incurred at any location are included but costs for unusual conditions that may occur at a specific location were not included. Thus normal excavation costs were included, but costs for blasting, which may or may not be required at a specific location, were not. Costs include only the instruments related to control of pH and fluoride on which limitations have been set. Other instruments frequently are installed but this is a matter of choice and the result of weighing the added convenience and perhaps reduced operating labor costs against the relatively insignificant increased capital cost. Costs for supporting utility requirements were so small in most instances that in fact no additional capacity would need to be constructed. This would obviously reduce the excess capacity available to the plant. If the excess utility capacity at a particular mill is so marginal that additional capacity must be added to handle the new load, then in all probability the added facilities will be much larger than the new load requires and thus most of the costs will be related to providing reserve capacity and flexibility which the plant did not previously have. In addition, the costs, even as projected by the commenter, are a very small part of the revenues generated by the operations and a very small part of the necessary costs of conducting these operations.

(20) One commenter states that the study (in addressing the energy requirements of the proposed regulations) completely overlooked the fact that the major energy demand is steam for operation of the treatment systems and for maintaining effective operating temperatures in biological treatment systems, etc.

Item (iv) of the preamble to the proposed regulation (39 FR 6492) did in fact refer only to the added electrical energy requirements. However, both the electrical and the thermal energy requirements have been reviewed. It is estimated that the annual electrical and thermal energy requirements to achieve these limitations will be less than 1.5 percent and less than 0.00002 percent respectively of the electrical and thermal energy used by the steel industry in 1972.

(21) One commenter inferred that waste water recycle is an "in-process" control and as such cannot be defined as BPCTCA unless it is normal practice in the industry.

In-process controls are changes in the operating process itself such that a substitution of one process for another will alter, reduce, or eliminate the raw waste loads produced, or render them less objectionable, or more amenable to treatment. In-process controls, which are in use by the average of the best facilities, as well as end-of-pipe treatment, can be used as the basis for establishing the BPCTCA limitations.

However, recycle is not an "in-process" control in this context in that it is the addition of facilities, usually at the outlet of a once through treatment facility, which permits the effluent to be recycled back to a scrubber system and does not require a change in the process or the scrubber system itself.

(22) One commenter stated that the biological oxidation process will partially oxidize most of the thiocyanates present to ammonia and hence recommended that the ammonia limit for by-product coke plants, using treatment Alternate II to achieve the BPCTCA limitations, be doubled.

Neither the data available to the Agency nor the reference materials studied indicate that this change would be justified. The biological system studied and sampled showed a reduction in ammonia as a result of treatment. The plant was not achieving the ammonia limitation proposed but this plant was not employing the ammonia removal step ahead of the biological system as proposed in the treatment schematic.

(23) One commenter stated that "the economic impact of the proposed effluent limitations guidelines upon the steel industry has been grossly underestimated by EPA."

The Agency believes that the EPA economic impact analysis report has assessed the magnitude of the potential economic impact as accurately as possible based on the cost estimates provided by the industry study contractor. This

issue is addressed further under the discussion of economic impact.

(24) One commenter has claimed that the proposed guidelines will result in the loss of 12,000 jobs from the steel employment in the Mahoning River Valley region. Furthermore, the commenter asserts that "there is ample justification for adding to the guidelines a subcategory based on the age of the facility."

The Agency has analyzed subcategorization on the basis of age per se and has concluded that such subcategorization is not appropriate (see comment #16).

The Agency intends to secure and evaluate additional information on possible economic impacts in this region as discussed under "(c) Economic Impact" and would consider revision of the regulations if the information appears to warrant this action.

(25) One comment was received to the effect that ranges of numbers (limitations) should be specified rather than specific limitations.

The Agency considers that the limitations already represent ranges, taking into account differences in processes used and other factors. Subcategorization has been used to take these factors into account with different limitations for each subcategory. Within subcategories, exceptions to the limitations have been provided where appropriate, thus constituting a range. Each numerical limitation represents a maximum value over a given period of time. This, in effect, represents a range from zero up to the specific limitation.

(26) One commenter stated generally, and with regard to individual subcategories, that the Agency had failed to specify factors to be taken into account by the permitting authority in establishing effluent limitations for individual permits, and that the Agency had erroneously established national applicable effluent limitations.

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.

(27) One commenter suggested that since new source performance standards are not specifically required by an outstanding court order concerning the effluent limitations guidelines, regulations for new sources for this industry should be dropped until a later time.

Section 306(b)(1)(B) of the Act provides for establishment of standards of performance for new sources within specified time frames. It is the opinion of the Agency that sufficient information is available on which to base a definition of best available demonstrated technology for new sources. Moreover, effluent limitations for new sources for some subcategories have been changed as a result of a reassessment of technologies with regard to adequacy of demonstration and availability to new sources for application in the immediate future.

(28) One commenter also expressed concern about the Agency's concentration on exemplary plants, questioning the representativeness of the plants studied, as well as the application of transfer technologies.

In establishing subcategories and setting effluent limitations the Agency specified the factors to be considered, such as type of operation and nature of pollutants discharged, and considered how these factors would be applied in identifying the amount of pollutant reduction attainable by particular subcategories of the industry. The resulting limitations identify specifically the amount of pollutant reduction attainable, in accordance with the provisions of section 304(b)(1)(A). The Act did not intend that factors should be described generally and then applied on a case by case basis to specific plants. Such an interpretation would be contrary to the intention of the Congress that national standards be established.

The determination of what constitutes "best practicable" technology for many industries involves, at first, a general review of the industry to determine the best technologies being practiced in the industry. Then, after closer review and investigation of these technologies, the "best practicable" technology is assessed as the average of the best, though not necessarily the best technology, after taking into account information relating to other factors spelled out in the Act.

In those industries where present treatment is uniformly inadequate, a higher degree of treatment than is presently practiced may be required based on a comparison with existing treatment for similar wastes in other industries or other subcategories of the same industry. Factors for determining the "best available" technology are similar except that rather than assessing the average of the best, the focus would be on the very best technology currently in use or demonstrably achievable.

Under this analysis of the statutory standard, it is the opinion of the Agency that it is not necessary that "best practicable" technology be currently in use as a single treatment. As applied to this industry, the methodology employed resulted in sufficient data to support the resulting limitations, and is completely consistent with the statutory requirements.

(b) *Revision of proposed regulations prior to promulgation.* As a result of public comments and continuing review and evaluation of the proposed regulation by the EPA, the following changes have been made in the regulation.

(1) Sections 420.12, 420.13, and 420.15 have been revised to include a provision for increased waste loads from by-product coke from plants using the indirect ammonia recovery process. This process produces 375.4 l/kkg (90 gallons per ton) more weak ammonia liquor than the semi-direct system on which the proposed guidelines were based. This increase in WAL volume is partially offset by reductions in other waste sources. These reductions are related to the absence of final coolers and of barometer condensers associated with the operation of crystalizers. The provision added to § 420.12 allows for a 30 percent increase in waste loads corresponding to an increase in waste water volume from 730 to 938 l/kkg (175 to 225 gallons per ton). The provisions added to §§ 420.13 and 420.15 allow for a 70 percent increase in waste loads corresponding to an increase in waste water volume from 417 to 709 l/kkg (100 to 170 gallons per ton). The reduction in waste volume from BPCTCA to BATEA of 730 to 417 l/kkg (175 to 100 gallons per ton) on the semi-direct systems is accomplished by cooling and recycling the barometric condenser waters. Since the indirect ammonia systems use less barometric condenser water the opportunities for reduction here are less and the reduction in waste water volume from BPCTCA to BATEA is less for the indirect ammonia plants, i.e., from 938 l/kkg to 709 l/kkg (225 gallons per ton to 170 gallons per ton). Approximately 15 percent of the by-product coke plants use the indirect ammonia recovery process.

(2) The applicability section of each subpart has been revised to indicate that the limitations are applicable to the process waste waters related to the operation to which the limitations apply.

(3) The Agency has continued to review the limitations proposed for the Blast Furnace (Ferromanganese) Subcategory. Several iron making blast furnaces have been successfully retro-fitted with recycle systems and the ferromanganese furnace visited was recycling the scrubber waters with no blowdown as such although there was an appreciable amount of water leaving the system in the filter cake (74 percent moisture) and as entrainment in the gas stream. However, there is no ferromanganese furnace practicing recycle of the cooler system effluents. Since the Agency is of the opinion that these systems can be recycled (as iron making blast furnaces are already doing) and since there is no system to sample at this time as a basis for the development of limitations, it has been necessary to base the limitations on the results of a detailed study of the once-through cooler system sampled and its associated scrubber recycle system. The study for this industry was made by a consulting engineering firm with many years of industrial water treatment system design experience and a reservoir of

water chemistry expertise. Nevertheless in recognition of the projected nature of the limitations the agency has revised the BPCTCA limitations as follows:

	Proposed (39 FR 6500, 6501) kg/kkg or lbs/1000 lbs.	Promulgated Herein kg/kkg or lbs/1000 lbs.
TSS	.1043	.1043
Cyanide	0.0312	.1563
Phenol	0.0042	.0203
Ammonia	0.2086	.5212

These are the "30 consecutive day" limitations. The maximum values for any one day have been increased to three times these amounts. The BATEA limitations remain as proposed.

(4) It is undesirable, and in many areas prohibited, to discharge directly from an anaerobic treatment system as indicated in the by-product coke (Alternate II), open hearth, and vacuum degassing subcategory treatment schematics for the BATEA level. Accordingly a step aerator has been added to the treatment schematics to aerate the effluent before discharge and to oxidize sulfides should they be formed in the anaerobic step.

(5) The proposed guidelines contained a limit for BOD5 on by-product coke plant wastes. This test has been used for years to quantify the oxygen requirements of coke plant wastes. However, on further review, the Agency has concluded that this limitation can be deleted. The guidelines contain limits on the parameters which contribute to the BOD5 (except for sulfide at the BPCTCA level which economic considerations precluded the provision of a means to control) and thus the limitation on BOD5 was concluded to be redundant.

(6) As a precaution against the daily maximum limitations being violated on an intolerably frequent basis, the daily maximum limitations have been increased to three times the values permitted on the "30 consecutive day" basis. Higher daily limits should not result in significantly increased waste loads discharged since the same thirty day values must still be achieved. The daily limits allow for normal daily fluctuations in a well designed and well operated plant, but are intended to be below those values that could result from severe upsets such as may result from equipment malfunctions.

(7) The technologies on which the NSPS limitations were based have been further reviewed. In consideration of the nature of the biological denitrification process and that it has been demonstrated full scale only on municipal wastes and other types of industrial wastes, but not on steel industry wastes, the nitrate limitation has been deleted from the NSPS for the open hearth and vacuum degassing subcategories. The limitations of the by-product coke subcategory can still be achieved by the alkaline chlorination and breakpoint chlorination process and is not affected by this change. The alkaline chlorination process is being used full scale on blast furnace wastes and thus is considered transferable to the very similar coke plant wastes. Breakpoint chlorination has been broadly applied for many years in the treatment of drinking water supplies. Its application following alkaline chlorination is considered not to be significantly different from its application to the treatment of drinking water supplies.

(8) The BATEA and NSPS limitation for suspended solids for the by-product coke and blast furnace subcategories was initially set on the basis of the need to filter the influent of the carbon columns envisioned as a part of the treatment schematics. This would reduce the TSS to the 10 mg/l level on which the limitation was based. However, treatment Alternate II (Biological) for by-product coke plants does not require filtration to operate properly. Clarification achieving a TSS level of 25 mg/l should be sufficient for a final step in this treatment alternate. The added cost of filtration cannot be justified by the relatively minor reduction in TSS load discharges achieved. The BATEA and NSPS suspended solids limitation has therefore been revised and is now based on 25 mg/l at the established flow rate.

(9) 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 economic impact analyses conducted in conjunction with the development of the effluent limitations guidelines assessed the economic impact on an overall industry basis. It was necessary to restrict the analysis to this level due to the lack of (1) detailed estimates of the costs for effluent control for individual plants and (2) detailed financial information for individual plants as a basis for assessing the effects of these costs upon profitability.

The Agency is aware of the contention that these guidelines may result in large employment reductions in the multi-community Mahoning River Valley region of eastern Ohio as contrasted to situations where employment impacts are localized. The information which the Agency presently has is not sufficient to support different requirements for this area, and thus the effluent limitations guidelines now being promulgated do not treat any region of the nation differently from other areas of the country. Companies contending that the effluent limitations guidelines will cause curtailment of operations and heavy unemployment in the Mahoning Valley area will have the opportunity to present detailed technical, cost and financial information to support this contention. The Agency will analyze this information and also will utilize its legal authority under section 308 of the Federal Water Pollution Control Act to obtain relevant cost and financial data for the affected plants.

This information will be used to determine whether revision of this regulation for the Mahoning Valley area is appropriate.

(d) *Cost-benefit analysis.* The detrimental effects of the constituents of waste waters now discharged by point sources within the steel making segment of the iron and steel manufacturing point source category are discussed in Section VI of the report entitled "Development Document for Effluent Limitations Guidelines for the Steel Making Segment of the Iron and Steel Manufacturing Point Source Category" (June 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 guidelines 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 the Integrated Iron and Steel Industry" (February 1974). 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 iron and steel 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 iron and steel 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 Steel Making Segment of the Iron and Steel Manufacturing Point Source Category," is being published and will be available for purchase in the near future 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 420, Iron and Steel Manufacturing Point Source Category, to read as set forth below. This final regulation is promulgated as set forth below, and shall be effective July 28, 1974.

Dated: June 14, 1974.

RUSSELL E. TRAIN,
Administrator.

Subpart A—By-Product Coke Subcategory

Sec.
420.10 Applicability: description of the by-product coke subcategory.
420.11 Specialized definitions.
420.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology achievable.
420.14 [Reserved]
420.15 Standards of performance for new sources.
420.16 Pretreatment standards for new sources.

Subpart B—Beehive Coke Subcategory

Sec.
420.20 Applicability: description of the beehive coke subcategory.
420.21 Specialized definitions.
420.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
420.24 [Reserved]
420.25 Standards of performance for new sources.
420.26 Pretreatment standards for new sources.

Subpart C—Sintering Subcategory

420.30 Applicability: description of the sintering subcategory.
420.31 Specialized definitions.
420.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
420.34 [Reserved].
420.35 Standards of performance for new sources.
420.36 Pretreatment standards for new sources.

Subpart D—Blast Furnace (Iron) Subcategory

420.40 Applicability; description of the blast furnace (iron) subcategory.
420.41 Specialized definitions.
420.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
420.44 [Reserved].
420.45 Standards of performance for new sources.
420.46 Pretreatment standards for new sources.

Subpart E—Blast Furnace (Ferromanganese) Subcategory

420.50 Applicability; description of the blast furnace (ferromanganese) subcategory.
420.51 Specialized definitions.
420.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
420.54 [Reserved].
420.55 Standards of performance for new sources.
420.56 Pretreatment standards for new sources.

Subpart F—Basic Oxygen Furnace (Semiwet Air Pollution Control Methods) Subcategory

420.60 Applicability; description of the basic oxygen furnace (semiwet air pollution control methods) subcategory.
420.61 Specialized definitions.
420.62 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.63 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
420.64 [Reserved]
420.65 Standards of performance for new sources.
420.66 Pretreatment standards for new sources.

Subpart G—Basic Oxygen Furnace (Wet Air Pollution Control Methods) Subcategory

420.70 Applicability; description of the basic oxygen furnace (wet air pollution control methods) subcategory.
420.71 Specialized definitions.
420.72 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.73 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
420.74 [Reserved]
420.75 Standards of performance for new sources.
420.76 Pretreatment standards for new sources.

Subpart H—Open Hearth Furnace Subcategory

420.80 Applicability; description of the open hearth furnace subcategory.
420.81 Specialized definitions.
420.83 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
420.83 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
420.84 [Reserved]
420.85 Standards of performance for new sources.
420.86 Pretreatment standards for new sources.

Subpart I—Electric Arc Furnace (Semiwet Air Pollution Control Methods) Subcategory

420.90 Applicability; description of the electric arc furnace (semiwet air pollution control methods) subcategory.
420.91 Specialized definitions.
420.92 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

AUTHORITY: Secs. 301, 304 (b), (c), 306 (b), (c), 307(c), Federal Water Pollution Control Act, as amended (the Act) (33 U.S.C. 1251, 1311, 1314 (b), (c), 1316 (b), (c), 1317(c)); 86 Stat. 816 et seq.; Pub. L. 92-500.

Subpart A—By-Product Coke Subcategory

§ 420.10 Applicability; description of the by-product coke subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the coke making operations conducted by the heating of coal in slot type ovens in the absence of air to produce coke.

§ 420.11 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) The term "cyanide A" shall mean those cyanides amenable to chlorination as described in *1972 Annual Book of ASTM Standards*, 1972, standard D2036-72, Method B, page 553.

(c) The term "product" shall mean coke.

(d) The term "indirect ammonia recovery process" shall mean the production of concentrated ammonia liquor by scrubbing coke-oven gas with a countercurrent water wash, rather than ammonia recovery utilizing a sulfuric acid ammonia absorber.

§ 420.12 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 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:

(a) Subject to the provisions of paragraphs (b) and (c) of this section and based upon the application of the best practicable control technology currently available the effluent quality required to be achieved under section 301(b)(1)(A) of the Act is as set forth in the following table:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
Ammonia	.2730	.0912
Cyanide	.0657	.0219
Oil and Grease	.0327	.0109
Phenol	.0015	.0015
TSS	.1095	.0365
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
Ammonia	.2730	.0912
Cyanide	.0657	.0219
Oil and Grease	.0327	.0109
Phenol	.0015	.0015
TSS	.1095	.0365
pH	Within the range 6.0 to 9.0.	

(b) Application of the factors listed in section 304(b)(1)(B) will require variation from the effluent limitations set forth in this section for any point source subject to such effluent limitations for those coke plants utilizing desulfurization units. The limitations specified may be exceeded up to 15 percent by those facilities equipped with gas desulfurization units to the extent that such measured discharge is necessary by reason of the increased effluent volume generated by these facilities.

(c) Application of the factors listed in section 304(b)(1)(B) will require variation from the effluent limitations set forth in this section for any point source subject to such effluent limitations for those coke plants utilizing the indirect ammonia recovery process. The limitations specified in paragraph (a) of this section may be exceeded up to 30 percent by those facilities recovering ammonia by this technique, to the extent that such measured discharge is necessary by reason of the increased effluent volume generated by this process.

§ 420.13 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 of 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:

(a) Subject to the provisions of paragraphs (b) and (c) of this section and based upon the application of the best available technology economically achievable, the effluent quality required to be achieved under section 301(b)(2)(A) of the Act is as set forth in the following table:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
Cyanide A	.0003	.0001
Phenol	.0006	.0002
Ammonia	.0126	.0042
Sulfide	.0003	.0001
Oil and Grease	.0126	.0042
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
Cyanide A	.0003	.0001
Phenol	.0006	.0002
Ammonia	.0126	.0042
Sulfide	.0003	.0001
Oil and Grease	.0126	.0042
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	

(b) Application of the factors listed in Section 304(b)(2)(B) will require variation from the effluent limitations set forth in this section for any point source subject to such effluent limitations for those coke plants utilizing desulfurization units. The limitations specified may be exceeded up to 25 percent by those facilities equipped with gas desulfurization units to the extent that such measured discharge is necessary by reason of the increased effluent volume generated by these facilities.

(c) Application of the factors listed in section 304(b)(2)(B) will require variation from the effluent limitations set forth in this section for any point source subject to such effluent limitations for those coke plants utilizing the indirect ammonia recovery process. The limitations specified in paragraph (a) of this section may be exceeded up to 70 percent by those facilities recovering ammonia by this technique, to the extent that such measured discharge is necessary by reason of the increased effluent volume generated by this process.

§ 420.14 [Reserved]

§ 420.15 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:

(a) Subject to the provisions of paragraphs (b) and (c) of this section and based upon the application of the best available demonstrated control technology, processes, operating methods, or other alternatives, the effluent quality required to be achieved by new sources under section 306(e) of the Act is as set forth in the following table:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
Cyanide A	.0003	.0001
Phenol	.0006	.0002
Ammonia	.0126	.0042
Sulfide	.0003	.0001
Oil and Grease	.0126	.0042
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
Cyanide A	.0003	.0001
Phenol	.0006	.0002
Ammonia	.0126	.0042
Sulfide	.0003	.0001
Oil and Grease	.0126	.0042
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	

(b) Application of the factors listed in section 306(b)(1)(B) will require variation from the effluent limitations set forth in this section for any point source subject to such effluent limitations for those coke plants utilizing desulfurization units. The limitations specified may be exceeded up to 25 percent in the case of facilities equipped with gas desulfurization units to the extent that such measured discharge is necessary by reason of the increased effluent volume generated by these facilities.

(c) Application of the factors listed in section 304(b)(2)(B) will require variation from the effluent limitations set forth in this section for any point source subject to such effluent limitations for those coke plants utilizing the indirect ammonia recovery process. The limitations specified in paragraph (a) of this section may be exceeded up to 70 percent by those facilities recovering ammonia by this technique, to the extent that such measured discharge is necessary by reason of the increased effluent volume generated by this process.

§ 420.16 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the by-product coke 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 prohibtions 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 420.15; 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—Beehive Coke Subcategory

§ 420.20 Applicability; descripiton of the beehive coke subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the coke making operations conducted by the heating of coal with the admission of air in controlled amounts for the purpose of producing coke. There are no by-product plants associated with the beehive operation.

§ 420.21 Specialized definitions.

For the purpose of this subpart:

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

§ 420.22 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 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 funda-

mentally 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.23 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.24 [Reserved]

§ 420.25 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.26 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the beehive coke 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 420.25; 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—Sintering Subcategory

§ 420.30 Applicability; description of the sintering subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the sintering operations conducted by the heating of iron bearing wastes (mill scale and dust from blast and steelmaking furnaces) together with fine iron ore, limestone, and coke fines in an ignition furnace to produce and agglomerate for charging to the blast furnace.

§ 420.31 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) The term "product" shall mean sinter.

§ 420.32 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 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0312	.0104
Oil and grease	.0063	.0021
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0312	.0104
Oil and Grease	.0063	.0021
pH	Within the range 6.0 to 9.0.	

§ 420.33 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 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
Oil and Grease	.0063	.0021
Sulfide	.00018	.00006
Fluoride	.0120	.0042
TSS	.0156	.0052
pH	Within the range 6.0 to 9.0.	
(English units) lb/1,000 lb of product		
Oil and Grease	.0063	.0021
Sulfide	.00018	.00006
Fluoride	.0120	.0042
TSS	.0156	.0052
pH	Within the range 6.0 to 9.0.	

§ 420.34 [Reserved]

§ 420.35 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
Oil and Grease	.0063	.0021
Sulfide	.00018	.00006
Fluoride	.0126	.0042
TSS	.0156	.0052
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
Oil and Grease	.0063	.0021
Sulfide	.00018	.00006
Fluoride	.0126	.0042
TSS	.0156	.0052
pH	Within the range 6.0 to 9.0.	

§ 420.36 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sintering 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 420.35; 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—Blast Furnace (Iron) Subcategory

§ 420.40 Applicability; description of the blast furnace (iron) subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the iron making operations in which iron ore is reduced to molten iron in a blast furnace.

§ 420.41 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 401 shall apply to this subpart.

(b) The term "cyanide *A*" shall mean those cyanides amenable to chlorination as described in *1972 Annual Book of ASTM Standards*, 1972, Standard D2036–72, Method B, page 553.

(c) The term "product" shall mean iron.

§ 420.42 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 characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0780	.0260
Cyanide	.0234	.0078
Phenol	.0063	.0021
Ammonia	.1953	.0651
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0780	.0260
Cyanide	.0234	.0078
Phenol	.0063	.0021
Ammonia	.1953	.0651
pH	Within the range 6.0 to 9.0.	

§ 420.43 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 characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0390	.0130
Cyanide *A*	.0004	.00013
Phenol	.0008	.00026
Ammonia	.0156	.0052
Sulfide	.0005	.00016
Fluoride	.0312	.0104
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0390	.0130
Cyanide *A*	.0004	.00013
Phenol	.0008	.00026
Ammonia	.0156	.0052
Sulfide	.0005	.00016
Fluoride	.0312	.0104
pH	Within the range 6.0 to 9.0.	

§ 420.44 [Reserved]

§ 420.45 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0390	.0130
Cyanide *A*	.0004	.00013
Phenol	.0008	.00026
Ammonia	.0156	.0052
Sulfide	.0005	.00016
Fluoride	.0312	.0104
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0390	.0130
Cyanide *A*	.0004	.00013
Phenol	.0008	.00026
Ammonia	.0156	.0052
Sulfide	.0005	.00016
Fluoride	.0312	.0104
pH	Within the range 6.0 to 9.0.	

§ 420.46 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the blast furnace (iron) 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 420.45; 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—Blast Furnace (Ferromanganese) Subcategory

§ 420.50 Applicability; description of the blast furnace (ferromanganese) subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the iron making operations in which iron/manganese ore is reduced to molten ferromanganese in a blast furnace.

§ 429.51 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 401 shall apply to this subpart.

(b) The term "cyanide *A*" shall mean those cyanides amenable to chlorination as described in *1972 Annual Book of ASTM Standards*, 1972, Standard D2036–72, Method B, page 553.

(c) The term "product" shall mean ferromanganese.

§ 420.52 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:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.3129	.1043
Cyanide	.4689	.1563
Phenol	.0624	.0208
Ammonia	1.5636	.5212
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.3129	.1043
Cyanide	.4689	.1563
Phenol	.0624	.0208
Ammonia	1.5636	.5212
pH	Within the range 6.0 to 9.0.	

§ 420.53 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0780	.0260
Cyanide *A*	.0008	.00026
Phenol	.0016	.00052
Ammonia	.0312	.0104
Sulfide	.0009	.0003
Manganese	.0156	.0052
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0780	.0260
Cyanide *A*	.0008	.00026
Phenol	.0016	.00052
Ammonia	.0312	.0104
Sulfide	.0009	.0003
Manganese	.0156	.0052
pH	Within the range 6.0 to 9.0.	

§ 420.54 [Reserved]

§ 420.55 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0780	.0260
Cyanide *A*	.0008	.00026
Phenol	.0016	.00052
Ammonia	.0312	.0104
Sulfide	.0009	.0003
Manganese	.0156	.0052
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0780	.0260
Cyanide *A*	.0008	.00026
Phenol	.0016	.00052
Ammonia	.0312	.0104
Sulfide	.0009	.0003
Manganese	.0156	.0052
pH	Within the range 6.0 to 9.0.	

§ 420.56 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the blast furnace (ferromanganese) 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 420.55; 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.

Subpart F—Basic Oxygen Furnace (Semi-wet Air Pollution Control Methods) Subcategory

§ 420.60 Applicability; description of the basic oxygen furnace (semiwet air pollution control methods) subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the steelmaking operations conducted for the manufacture of carbon steel in basic oxygen furnaces equipped with a semi-wet dust collection system.

§ 420.61 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 401 shall apply to this subpart.

(b) The term "semiwet" as associated with basic oxygen furnaces shall mean those systems which employ a spray chamber to spray water in excess of the amounts evaporated to condition furnace off-gases to a temperature where the fume and dusts can be removed by dry dust collection equipment. Because excess spray water is used in the spray chamber, an aqueous discharge from that chamber occurs.

§ 420.62 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.63 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.64 [Reserved]

§ 420.65 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.66 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the basic oxygen furnace (semiwet air pollution control methods) 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 420.65; 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 G—Basic Oxygen Furnace (Wet Air Pollution Control Methods) Subcategory

§ 420.70 Applicability; description of the basic oxygen furnace (wet air pollution control methods) subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the steelmaking operations conducted for the manufacture of carbon steel in a basic oxygen furnace equipped with a wet dust collection system.

§ 420.71 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) The term "wet" as associated with basic oxygen furnaces shall mean those off-gas dust cleaning systems which use entirely wet gas cooling and dust removal operations to scrub contaminants from furnace off-gases, and which produce an aqueous discharge from this operation.

(c) The term "product" shall mean steel.

§ 420.72 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 Devel-

opment 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	

§ 420.73 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
pH	Within the range 6.0. to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
pH	Within the range 6.0 to 9.0.	

§ 420.74 [Reserved]

§ 420.75 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
pH	Within the range 6.0 to 9.0.	

§ 420.76 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the basic oxygen furnace (wet air pollution control methods) 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 420.75; 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 stsandard applicable to users of such treatment works shall, except in the case of standards providing for no dischcarge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart H—Open Hearth Furnace Subcategory

§ 420.80 Applicability; description of the open hearth furnace subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the steelmaking operations conducted for the manufacture of carbon steel in an open hearth furnace equipped with wet dust collection systems.

§ 420.81 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) The term "product" shall mean steel.

§ 420.82 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 characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	

§ 420.83 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Nitrate	.0282	.0094
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Nitrate	.0282	.0094
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	

§ 420.84 [Reserved]

§ 420.85 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	

§ 420.86 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the open hearth furnace 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 420.85; 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 I—Electric Arc Furnace (Semiwet Air Pollution Control Methods) Subcategory

§ 420.90 Applicability; description of the electric arc furnace (semiwet air pollution control methods) subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the steelmaking operations conducted for the manufacture of carbon steel utilizing electric arc furnaces equipped with semi-wet dust collection systems.

§ 420.91 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 401 shall apply to this subpart.

(b) The term "semi-wet" as associated with electric arc furnaces shall mean the dust collection systems which use a spray chamber to spray water in excess of the amounts evaporated to condition furnace off-gases to a temperature where the fume and dusts can be removed by dry dust collection equipment. Because excess spray water is used in the spray chamber, an aqueous discharge occurs.

§ 420.92 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.93 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.94 [Reserved]

§ 420.95 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: There shall be no discharge of process waste water pollutants to navigable waters.

§ 420.96 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the electric arc furnace (semiwet air pollution control methods) 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 420.95; 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 J—Electric Arc Furnace (Wet Air Pollution Control Methods) Subcategory

§ 420.100 Applicability; description of the electric arc furnace (wet air pollution control methods) subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the steelmaking operations conducted for the manufacture of carbon steel utilizing electric arc furnaces equipped with wet furnace off-gas dust collection.

§ 420.101 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) The term "wet" as associated with electric arc furnaces shall mean those furnace off-gas dust cleaning systems which use entirely wet gas cooling and dust removal operations to scrub contaminants from furnace off-gases, producing aqueous discharges from the operation.

(c) The term "product" shall mean steel.

§ 420.102 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 characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0312	.0104
pH	Within the range 6.0 to 9.0.	

§ 420.103 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	

§ 420.104 [Reserved]

§ 420.105 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
Fluoride	.0126	.0042
Zinc	.0030	.0010
pH	Within the range 6.0 to 9.0.	

§ 420.106 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the electric arc furnace (wet air pollution control methods) 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 420.105; 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 K—Vacuum Degassing Subcategory

§ 420.110 Applicability; description of the vacuum degassing subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the degassing operations conducted by applying a vacuum to molten steel to further refine the steel produced:

§ 420.111 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 401 shall apply to this subpart.

(b) The term "product" shall mean steel.

§ 420.112 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 the State) will 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
pH	Within the range 6.0 to 9.0.	

§ 420.113 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0078	.0026
Zinc	.0015	.0005
Manganese	.0015	.0005
Lead	.00015	.00005
Nitrate	.0141	.0047
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0078	.0026
Zinc	.0015	.0005
Manganese	.0015	.0005
Lead	.00015	.00005
Nitrate	.0141	.0047
pH	Within the range 6.0 to 9.0.	

§ 420.114 [Reserved]

§ 420.115 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units)	kg/kkg of product	
TSS	.0078	.0026
Zinc	.0015	.0005
Manganese	.0015	.0005
Lead	.00015	.00005
pH	Within the range 6.0 to 9.0.	
(English units)	lb/1000 lb of product	
TSS	.0078	.0026
Zinc	.0015	.0005
Manganese	.0015	.0005
Lead	.00015	.00005
pH	Within the range 6.0 to 9.0.	

§ 420.116 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the vacuum degassing 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 420.115; 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 L—Continuous Casting Subcategory

§ 420.120 Applicability; description of the continuous casting subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the operations in which steel is continuously cast.

§ 420.121 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 401 shall apply to this subpart.

(b) The term "product" shall mean steel.

§ 420.122 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 dif-

ferent 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0780	.0260
Oil and Grease	.0234	.0078
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0780	.0260
Oil and Grease	.0234	.0078
pH	Within the range 6.0 to 9.0.	

§ 420.123 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0153	.0052
Oil and Grease	.0153	.0052
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0153	.0052
Oil and Grease	.0153	.0052
pH	Within the range 6.0 to 9.0.	

§ 420.124 [Reserved]

§ 420.125 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 one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
TSS	.0156	.0052
Oil and Grease	.0156	.0052
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	.0156	.0052
Oil and Grease	.0156	.0052
pH	Within the range 6.0 to 9.0.	

§ 420.126 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the continuous casting 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 420.125; 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.

[FR Doc.74-14433 Filed 6-27-74;8:45 am]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 420]

IRON AND STEEL MANUFACTURING; POINT SOURCE CATEGORY

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

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 420, Iron and Steel 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 by-product coke subcategory, the beehive coke subcategory, the sintering subcategory, the blast furnace (iron) subcategory, the blast furnace (ferromanganese) subcategory, the basic oxygen furnace (semiwet air pollution control methods) subcategory, the basic oxygen furnace (wet air pollution control methods) subcategory, the open hearth furnace subcategory, the electric arc furnance (semiwet air pollution control methods) subcategory, the electric arc furnace (wet air pollution control methods) subcategory, the vacuum degassing subcategory, and the continuous casting subcategory of the iron and steel manufacturing 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 420) 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 provided in 40 CFR 128.133, which provides as follows:

> In addition to the prohibitions set forth in Section 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.

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 420.15, 420.25, 420.35, 420.45, 420.55, 420.65, 420.75, 420.85, 420.95, 420.105, 420.115 and 420.125 of the proposed regulation for point sources within the by-product coke subcategory, the beehive coke subcategory, the sintering subcategory, the blast furnace (iron) subcategory, the blast furnace (ferromanganese) subcategory, the basic oxygen furnace (semiwet air pollution control methods) subcategory, the basic oxygen furnace (wet air pollution control methods) subcategory, the open hearth furnace subcategory, the electric arc furnace (semiwet air pollution control methods) subcategory, the electric arc furnace (wet air polltuion control methods) subcategory, the vacuum degassing subcategory, and the continuous casting subcategory (February 19, 1973; 39 FR 6484), contained the proposed pretreatment standards for new sources. The regulation promulgated simultaneously herewith contains §§ 420.16, 420.26, 420.36, 420.46, 420.56, 420.66, 420.76, 420.86, 420.96, 420.106, 420.116 and 420.126 which state the applicability of standards of performance for purposes of pretreatment standards 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 Steel Making Segment of the Iron and Steel Manufacturing Point Source Category" is now being published. The economic analysis report entitled "Economic Analysis of Proposed Effluent Guidelines, the Integrated Iron and Steel Industry", (February 1974) was made available at the time of proposal. Copies of the preliminary 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 iron and steel, the characteristics of these pollutants, and the degree of pollutant reduction obtainable through implementation of the proposed standards; and (2) the anticipated effects on other aspects of the environment (including air pollution, solid waste disposal and energy requirements) 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 iron and steel. 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 iron and steel manufacturing category (39 FR 6484; February 19, 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 420) 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 by-product coke subcategory, the beehive coke subcategory, the sintering subcategory, the blast furnace (iron) subcategory, the blast furnace (ferromanganese) subcategory, the basic oxygen furnace (semiwet air pollution control methods) subcategory, the basic oxygen furnace (wet air pollution control methods) subcategory, the open hearth furnace subcategory, the electric arc furnace (semiwet air pollution control methods) subcategory, the electric arc furnace (wet air pollution control methods) subcategory, the vacuum degassing subcategory, and the continuous casting subcategory, 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.

The process waste waters from the steel making segment subcategories may contain high concentrations of ammonia, oil and grease, cyanide, sulfide, phenol, fluoride, nitrate, lead, zinc and manganese which could interfere with the operation of publicly owned treatment works, pass through such works untreated or inadequately treated or otherwise be incompatible with such treatment works. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to Section 307(b) of the Act.

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, SW., Washington, D.C. 20460. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

In consideration of the foregoing, it is hereby proposed that 40 CFR Part 420 be amended to add §§ 420.14, 420.24, 420.34, 420.44, 420.54, 420.64, 420.74, 420.84, 420.94, 420.104, 420.114 and 420.124 as set forth below. All comments received on or before July 29, 1974, will be considered.

Dated: June 14, 1974.

RUSSELL E. TRAIN,
Administrator.

Part 420 is proposed to be amended as follows:

Subpart A is amended by adding § 420.14 as follows:

§ 420.14 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.12 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart B is amended by adding § 420.24 as follows.

§ 420.24 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.22 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart C is amended by adding § 420.34 as follows:

§ 420.34 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.32 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart D is amended by adding § 420.44 as follows:

§ 420.44 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.42 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by

the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart E is amended by adding § 420.54 as follows:

§ 420.54 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.52 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart F is amended by adding § 420.64 as follows:

§ 420.64 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.62 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart G is amended by adding § 420.74 as follows:

§ 420.74 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.72 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart H is amended by adding § 420.84 as follows:

§ 420.84 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.82 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart I is amended by adding § 420.94 as follows:

§ 420.94 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.92 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart J is amended by adding § 420.104 as follows:

§ 420.104 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.102 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart K is amended by adding § 420.114 as follows:

§ 420.114 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.112 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

Subpart L is amended by adding § 420.124 as follows:

§ 420.124 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 420.122 shall not presently apply. Some of the constituents of the process waste waters from this subcategory may interfere with certain treatment works or may pass through such treatment works inadequately treated. Therefore, such process waste waters should receive special consideration by the operator of the publicly owned treatment works and may be the subject of subsequent further regulation pursuant to section 307(b) of the Act.

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