Title 40—Protection of the Environment
CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY
SUBCHAPTER N—ENVIRONMENTAL STANDARDS AND REGULATIONS
PART 420—IRON AND STEEL MANUFACTURING POINT SOURCE CATEGORY

On February 19, 1974, notice was published in the Federal Register (39 FR 6494) that the Environmental Protection Agency (EPA) was proposing new source performance standards and effluent limitations guidelines for existing sources and standards for performance and pretreatment standards for new sources within the by-product coke subcategory, basic oxygen furnace subsection, sintering subcategory, blast furnace (iron) subcategory, basic oxygen 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, basic oxygen furnace (ferromanganese) subcategory, basic oxygen furnace (ferromanganese) subcategory, and the continuous casting subcategory. In addition, the regulations as proposed were supported by two other documents entitled: (1) Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Steel Making Segment of the Iron and Steel Industry (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 of the date of publication. Prior public participation in the rulemaking included comments and responses from the States, Federal agencies, and other interested parties. Letters were written by the States, 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.

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

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

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 was considered to achieve its greatest effectiveness in adsorbing chlorinated organics and carbon adsorption is considered the most efficient means for the removal of some. 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. The Agency believes that the other three recycle systems can achieve the flow rates on which the limitations were developed 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 the precipitator and the flue gas for a semi-wet scrubber system which was operating at the rate of 5,421 l/kg (130 gallons per ton), but the system is operated as a closed system with no discharge.

The other recycle 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 the precipitator and the flue gas for a semi-wet scrubber system which was operating at the rate of 5,421 l/kg (130 gallons per ton), but the system is operated as a closed system with no discharge.

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 l/kg (60 gallons per ton) and also that the plugging problems referred to affect only the side of the 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 the reduced flow rates 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 an 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 BFCITCA.

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 made to the effect that by-product coke plant waste water rates (per unit of production) will be increasing in the future rather than decreasing, as the BFCITCA 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 wastewater produced and therefore were not 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 eluent 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 have been received to the effect that the recycling of blast furnace concentrate waste water has 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 recyle. The other four plants were operating recycle systems. Three of these were discharging at a rate less than the 521.4 l/kg (125 gallons per ton) of wet air pollution control systems 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 the plant 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 gas cleaning systems. 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
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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 BPC-
CTCA are based on demonstrated treat-
ment technologies, and since data on the
total cyanide content of the effluent is not
available, such limitations could be and were developed for
total cyanides.

However, the BATEA limitations are
based on the destruction of only the sim-
ple or free (and most toxic) cyanides
rather than total cyanides. The degree of
conversion of free cyanides via alka-
line chlorination varies with the type of
operation being conducted. In addition, the processes reflect
the efficiency of the biological system as proposed in
the proposed regulation (39 FR 4952) did not
completely overlook the fact that the major
energy demand is steam for operation of the
treatment systems and for maintaining
operating temperatures in biological treatment systems.

Item (iv) of the preamble to the pro-
posed regulation (39 FR 4952) 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 esti-
mated 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.

The BATEA limitations for waste water recycle is an “in-process”
control and as such cannot be defined as
BPCCTCA unless it is normal practice
in the industry.

In-process controls are changes in
the process itself such that a sub-
stitution of one process for another will
alter, reduce, or eliminate the raw waste
loads produced, or render them less ob-
structable, or more amenable to treat-
ment. In-process controls, which are in
use by the average of the best facilities,
as well as end-of-pipe treatment, can be used in the best way for establishing
the BATEA limitations.

However, in-process control is not an “in-process”
control in this context in that it is the
addition of facilities, usually at the out-
let 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.

The treatment technology to be applied
is primarily a function of the pollutants
present and 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 facil-
ity. Land availability for application of
the treatment 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
require large land areas and in ad-
dition alternatives are available to those
facilities which do have a land availabil-
ity problem.

The limitations are primarily a func-
tion 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 are a function of op-
tion 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 be-
cause 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 limi-
tations received some input from the
blast furnace operation in comparison
to the other plants, which was relative-
ly straightforward and the data was con-
sidered representative and capable of
being adequately interpreted.

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

The BATEA cyanide limitations do
not require additional heating of the
waste water streams over and above the temperatures
normally encountered. The one blast fur-
case operation surveyed which was util-
ized for chlorination achieved low
conversion of cyanide. Those processes
were not achieved for the treated
effluent without additional heating.
Moreover, the BATEA cyanide limitation
is specifically based upon cyanides amen-
able to chlorination, rather than total
cyanides as reasons cited above. This
commenter has previously contended
that chlorination is not effective in de-
stroying complex cyanides except at ele-
vated 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 con-
structing 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,
contact costs were included, or costs that
may not be required at a specific location,
were not. Costs include only the instru-
ments related to control of pH and fluo-
rine on which limitations have been set.
Other instruments frequently are in-
stalled but this is a matter of choice and
the result of weighing the added con-
venience and perhaps reduced operating
load costs against the relatively insigni-
ficant increased capital cost. Costs for
supporting utility requirements were so
small in most instances that in fact no
additional capacity would need to be con-
structed. This would obviously reduce
the excess capacity available to the plant.
If the excess utility capacity at a par-
ticular mill is so marginal that addi-
tional capacity must be added to handle
the new load, then in all probability the
excess capacity available to 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 opera-
tions and a very small part of the neces-
sary costs of conducting these operations.

(20) One commenter states that the
study (in addressing the energy require-
mements of the proposed limitations)
completely overlooked the fact that the major
energy demand is steam for operation of the
treatment systems and for maintaining
operating temperatures in biological treatment systems.

One comment was received objecting
to the selenium limitation. (39 FR 4952) did in
fact refer only to the selenium energy requirements. However, both the
electrical and the thermal energy
requirements have been reviewed. It is esti-
mated 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.

The selenium limitations for waste water recycle is an “in-process”
control and as such cannot be defined as
BPCCTCA unless it is normal practice
in the industry.

In-process controls are changes in
the process itself such that a sub-
stitution of one process for another will
alter, reduce, or eliminate the raw waste
loads produced, or render them less ob-
structable, or more amenable to treat-
ment. In-process controls, which are in
use by the average of the best facilities,
as well as end-of-pipe treatment, can be used in the best way for establishing
the BATEA limitations.

However, in-process control is not an “in-process”
control in this context in that it is the
addition of facilities, usually at the out-
let 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 parti-

cially oxidize most of the thiocyanates
present to ammonia and hence recom-

mended that the ammonia limit for the
product coke plants, using treatment
Alternate II to achieve the BPCCTCA
limitations, be doubled.

Neither the data available to the
Agency nor the reference materials stud-
ied indicate that this change would be
justified. The biological system studied
and sampled showed a reduction in am-
monia as a result of treatment. The plant
was not achieving the ammonia limita-
tion proposed but this plant was not em-
ploying the ammonia removal step ahead of
the biological system as proposed in the
proposed regulation.

(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 eco-
nomic impact analysis report has as-

sessed the magnitude of the potential
economic impact as accurately as pos-
sible based on the cost estimates provided
"
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 in the Mahoning River Valley region. Furthermore, the commenter asserts that "there is ample justification for adding the new source performance standard and making it one of the regulatory categories 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 in order to take into account the considerable variation in age of facilities.

The Agency intends to secure and evaluate additional information on possible economic impacts in this region as discussed under "(a) Economic Impact.

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

The Agency considers that the limitations allow for wider 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. Subcategorization 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) (5) of the Act provides for the uniform implementation of the 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 problem. Several industries visited 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 standard. The limitations contained in the regulation were required by special circumstances applicable to individual industries.

Accordingly, a provision allowing flexibility in the application of the limitations representing best practicable control technology currently available has been added to the regulation. This approach is intended to account for special circumstances applicable to individual industries. Accordingly, a provision allowing flexibility in the application of the limitations representing best practicable control technology currently available has been added to each subpart. This approach is intended to account for special circumstances applicable to individual industries. Accordingly, a provision allowing flexibility in the application of the limitations representing best practicable control technology currently available has been added to each subpart. This approach is intended to account for special circumstances applicable to individual industries.

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 a single treatment of the effluent 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 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 that the Agency has the authority to issue effluent limitations guidelines and standards for product coke from plants using the indirect ammonia recovery process. This process produces 375.4 kg/m3 (90 gallons per ton) more than ammonia liquid than the direct ammonia recovery process. The proposed guidelines were based on this increase in the WIR volume is partially offset by reductions in other waste sources. The increased reductions are related to the absence of final coolers and of barometric condensers associated with the operation of crystallizers. 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 933 kg/m3 (175 to 225 gallons per ton). The provision added to §§ 420.13 and 420.15 sets an upper limit of 1.5 kg/m3 (375 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. The reduction in waste water volume from BPTCA to BATEA is less for the indirect ammonia plants, i.e., from 933 kg/m3 to 709 kg/m3 (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 amount of waste produced at the time to which the limitations apply.

(3) The Agency has continued to review the limitations proposed for the Steel Furnaces (ferromanganese) Subcategory. Several comments have been received from the steel industry concerned with the practicability of the proposed limitations. The proposed guidelines were based on the information appears to warrant this action.

One commenter also expressed concern about the Agency's concentration on exemplar 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 the type of pollutants discharged, and considered how these factors would be applied in identifying the amount of pollutant reduction attainable by particular subcategories of plants. The proposed guidelines identify specifically the amount of pollutant reduction attainable, in accordance with the provisions of section 304 (b) (1) (B). 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 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 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 support for the resulting limitations, and is completely consistent with the statutory requirements.
These are the "30 consecutive day" limitations. The maximum values for any one day have been increased to three times these amounts. The BAT and NSPS 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 by-product coke subcategories. The 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 system.

(5) The proposed guidelines contain 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 sulfate at the BFTCA 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 severeupssets 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 not on industrial 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 subcategories 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 used for many years in the treatment of drinking water supplies. Its application following alkaline chlorination is considered not to be significant, particularly by applying it to the treatment of drinking water supplies.

(8) The BATEA and NSPS limitation for suspended solids for the 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 has been estimated at a 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 and 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 (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 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 the best practicable control technology has been added to each subcategory, to account for special circumstances that may not have been adequately accounted for when these regulations were developed.

(e) Cost-benefit analysis. The detrimental effects of the pollutants now discharged by point sources within the steel making segment of the iron and steel industry may contain a considerable volume of metals in various forms as a part of the suspended solids pollutant. The Agency believes that the benefits of reducing the pollutants discharged from the coke industry to support different requirements for this area and thus the effluent limitations guidelines are not treat any region of the nation differently from other areas of the country. Companies contending that the effluent limitations guidelines are not applicable to the treatment of drinking water supplies.

The Agency is aware of the contention that the effluent 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 are intended to be below those values for any one day have been increased to these values. They must be provided for the period 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 306 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.

(f) 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 the 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 are intended to be below those values for any one day have been increased to these values. They must be provided for the period 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 306 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.

(g) 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
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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 some 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.

### (d) 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 Print-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 rulemaking is promulgated as set forth below, and shall be effective July 28, 1974.

Dated: June 14, 1974.

RUSSELL E. TRAIN, Administrator.

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

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<td>420.50</td>
<td>Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.</td>
<td>420.77</td>
</tr>
<tr>
<td>420.51</td>
<td>[Reserved]</td>
<td>420.78</td>
</tr>
<tr>
<td>420.52</td>
<td>Standards of performance for new sources.</td>
<td>420.79</td>
</tr>
<tr>
<td>420.53</td>
<td>Pretreatment standards for new sources.</td>
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### Subpart G—Basic Oxygen Furnace (Semiwet Air Pollution Control Methods) Subcategory

<table>
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<td>420.56</td>
<td>Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.</td>
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<td>420.57</td>
<td>[Reserved]</td>
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<td>420.58</td>
<td>Standards of performance for new sources.</td>
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<td>420.59</td>
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### Subpart H—Open Hearth Furnace Subcategory

<table>
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<td>420.61</td>
<td>Specialized definitions.</td>
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</tr>
<tr>
<td>420.62</td>
<td>Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.</td>
<td>420.89</td>
</tr>
<tr>
<td>420.63</td>
<td>[Reserved]</td>
<td>420.90</td>
</tr>
<tr>
<td>420.64</td>
<td>Standards of performance for new sources.</td>
<td>420.91</td>
</tr>
<tr>
<td>420.65</td>
<td>Pretreatment standards for new sources.</td>
<td>420.92</td>
</tr>
</tbody>
</table>

### Subpart I—Electric Arc Furnace (Semimelt Air Pollution Control Methods) Subcategory
Subpart A—By-Product Coke Subcategory
§ 420.10 Applicability; description of the by-product coke subcategory.

The provisions of this subpart are applicable to processes within the industry producing coke from coal or coke oven gas where the coke is recovered through a coke oven system or similar process and is used to produce by-products other than 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 “coking A” shall mean those cokes amenable to chlorination as described in 1972 Annual Book of ASTM Standards, 1972, standard D2095-72, Method B, page 559.
(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 counter-current 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 size and type of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which could 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:

<table>
<thead>
<tr>
<th>Effluent characteristic</th>
<th>Maximum for any one day consecutive</th>
<th>Average of daily characterist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>0.016 mg/l</td>
<td>0.008 mg/l</td>
</tr>
<tr>
<td>Cyanide</td>
<td>5.0 mg/l</td>
<td>2.0 mg/l</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.15 mg/l</td>
<td>0.015 mg/l</td>
</tr>
<tr>
<td>TSS</td>
<td>10 mg/l</td>
<td>1.0 mg/l</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range of 6.0 to 9.0</td>
<td></td>
</tr>
</tbody>
</table>

| (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 10 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 50 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.

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§ 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 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, 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:

<table>
<thead>
<tr>
<th>Effluent characteristic</th>
<th>Maximum for any one day</th>
<th>Average of daily values for thirty consecutive days shall not exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Metric units) kg/kg of product</td>
<td></td>
</tr>
<tr>
<td>Cyanide A</td>
<td>0.003</td>
<td>0.001</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.006</td>
<td>0.003</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.003</td>
<td>0.001</td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.001</td>
<td>0.00003</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>0.002</td>
<td>0.0001</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td></td>
</tr>
</tbody>
</table>

(English units) lb/1000 lb of product

| Cyanide A | 0.002 | 0.001 |
| Phosphorus | 0.006 | 0.003 |
| Ammonia | 0.003 | 0.001 |
| Sulfide | 0.001 | 0.00003 |
| Oil and Grease | 0.002 | 0.0001 |
| 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 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 coke plants utilizing 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 technology, processes, operating methods, or other alternatives, the effluent quality subject to such effluent limitations for coke plants utilizing the indirect ammonia recovery process.

<table>
<thead>
<tr>
<th>Effluent characteristic</th>
<th>Maximum for any one day</th>
<th>Average of daily values for thirty consecutive days shall not exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Metric units) kg/kg of product</td>
<td></td>
</tr>
<tr>
<td>Cyanide A</td>
<td>0.003</td>
<td>0.001</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.006</td>
<td>0.003</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.003</td>
<td>0.001</td>
</tr>
<tr>
<td>Sulfide</td>
<td>0.001</td>
<td>0.00003</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>0.002</td>
<td>0.0001</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td></td>
</tr>
</tbody>
</table>

(English units) lb/1000 lb of product

| Cyanide A | 0.002 | 0.001 |
| Phosphorus | 0.006 | 0.003 |
| Ammonia | 0.003 | 0.001 |
| Sulfide | 0.001 | 0.00003 |
| Oil and Grease | 0.002 | 0.0001 |
| pH | Within the range 6.0 to 9.0 |

§ 420.16 Pretreatment standards for new sources.

The pretreatment standards for coke plants utilizing the indirect ammonia recovery process.
mentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors 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:

**Rules and Regulations**

### § 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 furnaces, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and, effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in the 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 fact 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 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 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:

**§ 420.31 Specialized definitions.**

For the purpose of this subpart:

1. The term "product" shall mean sinter.

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

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, blast furnaces, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and, effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in the 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 fact 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 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 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.
§ 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 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 128.133, 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 D2035-72, 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.

To establish 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, environmental 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) may 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.

§ 420.43 Effluent limitations 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.

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§ 420.46 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 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 standards for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 420.46; 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 wastes 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/ferromanganese ore is reduced to molten ferromanganese in a blast furnace.

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

<table>
<thead>
<tr>
<th>Effluent characteristic</th>
<th>Maximum for any one day</th>
<th>Average of daily values for thirty consecutive days shall not exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Metric units) kg/kg of product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TS... . .078..:n</td>
<td>9.0.</td>
<td>9.0.</td>
</tr>
<tr>
<td>Cyanide...--a----</td>
<td>0.0052</td>
<td>0.0052</td>
</tr>
<tr>
<td>Ammonia...--a----</td>
<td>0.0101</td>
<td>0.0101</td>
</tr>
<tr>
<td>pH...............</td>
<td>Within the range 6.0 to 9.0.</td>
<td>6.0 to 9.0.</td>
</tr>
</tbody>
</table>

| (English units) lb/1000 lb of product |
|-------------------------|------------------------|---------------------------------------------------------------|
| TS... . .078..:n | 9.0. | 9.0. |
| Cyanide...--a---- | 0.0052 | 0.0052 |
| Ammonia...--a---- | 0.0101 | 0.0101 |
| pH............... | Within the range 6.0 to 9.0. | 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:

<table>
<thead>
<tr>
<th>Effluent characteristic</th>
<th>Maximum for any one day</th>
<th>Average of daily values for thirty consecutive days shall not exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Metric units) kg/kg of product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TS... . .078..:n</td>
<td>9.0.</td>
<td>9.0.</td>
</tr>
<tr>
<td>Cyanide...--a----</td>
<td>0.0052</td>
<td>0.0052</td>
</tr>
<tr>
<td>Ammonia...--a----</td>
<td>0.0101</td>
<td>0.0101</td>
</tr>
<tr>
<td>pH...............</td>
<td>Within the range 6.0 to 9.0.</td>
<td>6.0 to 9.0.</td>
</tr>
</tbody>
</table>

| (English units) lb/1000 lb of product |
|-------------------------|------------------------|---------------------------------------------------------------|
| TS... . .078..:n | 9.0. | 9.0. |
| Cyanide...--a---- | 0.0052 | 0.0052 |
| Ammonia...--a---- | 0.0101 | 0.0101 |
| pH............... | Within the range 6.0 to 9.0. | 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

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In addition to the prohibitions set forth in 40 CFR 128.130, the pretreatment standards 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 publically 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 for that pollutant, the use 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 basic oxygen furnaces equipped with a semi-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 401 shall apply to this subpart.

(b) The term "semi-wet" 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-gasses 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 available control technology currently available.

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

In establishing the limitations set forth in 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 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.

§ 420.66 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the basic oxygen furnace (semi-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 336 of the Act, if it were to discharge pollutants to the navigable waters, shall be the standard set forth in 40 CFR Part 420, except that, for the purpose of this section 30 CFR 128.130 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.130, 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 publically 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 for that pollutant, the use 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.


RULES AND REGULATIONS

§ 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:

<table>
<thead>
<tr>
<th>Effluent characteristic</th>
<th>Effluent limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum for any one day</td>
</tr>
</tbody>
</table>

(Metric units) kg/kg of product

<table>
<thead>
<tr>
<th>TSS</th>
<th>0.015</th>
<th>0.003</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

(English units) lb/1000 lb of product

<table>
<thead>
<tr>
<th>TSS</th>
<th>0.012</th>
<th>0.002</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

§ 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 (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 established in 40 CFR Part 401, §420.76; 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 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 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 the cost of pollution control, waste 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 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 new source subject to the provisions of this subpart after application of the best practicable control technology currently available:

<table>
<thead>
<tr>
<th>Effluent characteristic</th>
<th>Effluent limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum for any one day</td>
</tr>
</tbody>
</table>

(Metric units) kg/kg of product

<table>
<thead>
<tr>
<th>TSS</th>
<th>0.012</th>
<th>0.002</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

(English units) lb/1000 lb of product

<table>
<thead>
<tr>
<th>TSS</th>
<th>0.012</th>
<th>0.002</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
§ 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 new point source subject to the provisions of this subpart after application of the best available technology economically achievable:

<table>
<thead>
<tr>
<th>Effluent characteristics</th>
<th>Maximum for any one day</th>
<th>Average of daily values for thirty consecutive days shall not exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Metric units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSS</td>
<td>0.015</td>
<td></td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td>Nitrate</td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(English units)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td>0.005 lb/1,000 lb of product</td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.002 lb/1,000 lb of product</td>
</tr>
<tr>
<td>Nitrate</td>
<td>0.002 lb/1,000 lb of product</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.001 lb/1,000 lb of product</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0.</td>
</tr>
</tbody>
</table>

§ 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:

<table>
<thead>
<tr>
<th>Effluent limitations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Metric units)</td>
<td></td>
</tr>
<tr>
<td>TSS</td>
<td>Maximum for any one day 0.015 kg/kg of product</td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.006 kg/kg of product</td>
</tr>
<tr>
<td>Nitrate</td>
<td>0.006 kg/kg of product</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.003 kg/kg of product</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(English units)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td>Maximum for any one day 0.005 lb/1,000 lb of product</td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.002 lb/1,000 lb of product</td>
</tr>
<tr>
<td>Nitrate</td>
<td>0.002 lb/1,000 lb of product</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.001 lb/1,000 lb of product</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0.</td>
</tr>
</tbody>
</table>

§ 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, the pretreatment standard for incompatible pollutants introduced into the open hearth furnace subcategory, which may be discharged by a new source subject to the provisions of this subpart after application of the best available technology economically achievable, 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, the pretreatment standard for incompatible pollutants introduced into...
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 discharge effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

**Effluent limitations**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Maximum for any one day</th>
<th>Average of daily values for thirty consecutive days shall not exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Metric units) kg/kg of product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSS</td>
<td>0.012</td>
<td>0.014</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td></td>
</tr>
<tr>
<td>(English units) lb/1000 lb of product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSS</td>
<td>0.010</td>
<td>0.010</td>
</tr>
<tr>
<td>pH</td>
<td>Within the range 6.0 to 9.0</td>
<td></td>
</tr>
</tbody>
</table>

**§ 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 point source subject to the provisions of this subpart:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Maximum for any one day</th>
<th>Average of daily values for thirty consecutive days shall not exceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Metric units) kg/kg of product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSS</td>
<td>0.010</td>
<td>0.012</td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.0033</td>
<td>0.0033</td>
</tr>
<tr>
<td>Zinc</td>
<td>Within the range 0.0 to 0.05 &lt; 1.0 to 1.0</td>
<td></td>
</tr>
<tr>
<td>(English units) lb/1000 lb of product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSS</td>
<td>0.010</td>
<td>0.010</td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.0033</td>
<td>0.0033</td>
</tr>
<tr>
<td>Zinc</td>
<td>Within the range 0.0 to 0.05 &lt; 1.0 to 1.0</td>
<td></td>
</tr>
</tbody>
</table>

**§ 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 128.139 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.121, 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 420.106; 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.
§ 420.112 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 | Maximum for any one day | Average of daily values for thirty consecutive days
|-------------------------|-------------------------|------------------------|
| TSS (Metric units) kg/kg of product | 10.0 | 0.005
| pH (English units) | Within the range 6.0 to 9.0 | 0.002

§ 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 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 122, 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 420.118; 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 pollutant, 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 subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator (or the State) shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations or other such factors related to such discharger as are fundamentally different from the factors considered in the establishment of the guidelines.

The following limitations 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 | Maximum for any one day | Average of daily values for thirty consecutive days
|-------------------------|-------------------------|------------------------|
| TSS (Metric units) kg/kg of product | 6.0 to 9.0 | 0.002
| Zinc (Metric units) | Within the range 0.0 to 0.0 | 0.006
| Magnesium (Metric units) | Within the range 0.0 to 0.0 | 0.006
| Leach (Metric units) | Within the range 0.0 to 0.0 | 0.006
| pH (English units) | Within the range 6.0 to 9.0 | 0.002

§ 420.116 Pretreatment standards for new sources.

The pretreatment standards under section 307(e) of the Act for a source with-
§ 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:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Effluent Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td></td>
</tr>
<tr>
<td>Oil and Grease</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Within the range to 9.0.</td>
</tr>
</tbody>
</table>

§ 420.124 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:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Standards of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td></td>
</tr>
<tr>
<td>Oil and Grease</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Within the range to 9.0.</td>
</tr>
</tbody>
</table>

§ 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 307 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 129, 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 the standard for new sources specified in 40 CFR 128.135; 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.

[FEDERAL REGISTER VOL. 39, NO. 126—FRIDAY, JUNE 28, 1974]
ENVIRONMENTAL PROTECTION AGENCY

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); 40 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 the extent of application of effluent limitations guidelines to existing sources which discharge to publicly owned treatment works. The regulation is intended to supplement a final regulation for pretreatment standards for new sources which, as published in final form on November 8, 1973 (38 FR 30983), is intended to be complementary to the effluent limitations guidelines for existing sources established, that is, to establish pretreatment standards for new sources which are directed to a publicly owned treatment works, rather than to discharges of pollutants into the navigable waters.

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 (wet air pollution control methods) subcategory, the basic oxygen furnace (semiwet air pollution control methods) subcategory, the basic oxygen furnace (dry air pollution control methods) subcategory, the electric arc furnace (wet air pollution control methods) subcategory, the electric arc furnace (sintering) subcategory, the open hearth furnace subcategory, the electric arc furnace (dry air pollution control methods) 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 fail within the description of this 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 divided to be compatible with the guidelines for 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 and subject to Section 128.133(b) 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 Section 301 and 304(D) of the Act, and if the privately 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 the pollutant and provided further that when the effluent limitations guidelines for each industry is promulgated, it will be possible to propose concerning the application of such guidelines to pretreatment.

The regulation proposed below is intended to implement that portion of § 307(a) 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 this standard based upon best practicable control technology currently available.

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 public inspection of this information in the Federal Register, where this is practicable. They provide, however, that where such information is not practicable 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 pollutant 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 pretreatment and effluent standards; and (2) the anticipated effects on other aspects of the environment (including air pollution, solid waste disposal, and energy requirements) of 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 these treatment technologies and the potential effects of these 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 impossible 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 the iron and steel manufacturing category (39 FR 12814; 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 sections 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 coking subcategory, the blast furnace (iron) subcategory, the blast furnace (ferromanganese) subcategory, the basic oxygen furnace (semimelt) subcategory, the basic oxygen furnace (wet air pollution control methods) subcategory, the electric arc furnace (semimelt) subcategory, the open hearth furnace subcategory, the electric arc furnace (wet air pollution control methods) subcategory, the vacuum degasification subcategory, the vacuum degasification subcategory, and the continuous casting subcategory, the Agency, 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 minimize the interfer 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, fluoide, sulfate, 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.

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 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.

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:
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 § 420.82 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 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 § 420.92 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 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.