

## Title 40—Protection of the Environment

CHAPTER I—ENVIRONMENTAL  
PROTECTION AGENCY

[FRL 444-2]

PART 434—COAL MINING POINT SOURCE  
CATEGORY

## Interim Final Rule Making

Notice is hereby given that effluent limitations and guidelines for existing sources to be achieved by the application of best practicable control technology currently available as set forth in interim final form below are promulgated by the Environmental Protection Agency (EPA). The regulation set forth below establishes Part 434—coal mining point source category and will be applicable to existing sources for the coal preparation plant subcategory (Subpart A), the coal storage, refuse storage and coal preparation ancillary area subcategory (Subpart B), the acid or ferruginous mine drainage subcategory (Subpart C), and the alkaline mine drainage subcategory (Subpart D) of the coal mining point source category pursuant to sections 301, 304 (b) and (c), of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, 1311, 1314 (b) and (c), 86 Stat. 816 et seq.; Pub. L. 92-500) (the Act). Simultaneously the Agency is publishing in proposed form pretreatment standards for existing sources in the coal mining point source category. The Agency expects to publish at a future date proposed effluent limitations and guidelines for existing sources to be achieved by the application of best available technology economically achievable, standards of performance for new point sources and pretreatment standards for new sources.

(a) *Legal authority.* (1) *Existing point sources.* Section 301(b) of the Act requires the achievement by not later than July 1, 1977, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 304(b) of the Act. Section 301(b) also requires the achievement by not later than July 1, 1983, of effluent limitations for point sources, other than publicly owned treatment works which require the application of best available technology economically achievable which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 304(b) of the Act.

Section 304(b) of the Act requires the Administrator to publish regulations providing guidelines for effluent limitations setting forth the degree of effluent reduction attainable through the application of the best practicable control technology currently available and the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedural innovations, operating

methods and other alternatives. The regulation herein sets forth effluent limitations and guidelines, for the degree of effluent reduction attainable through the application of best practicable control technology currently available pursuant to sections 301 and 304(b) of the Act, for the coal preparation plant subcategory (Subpart A), the coal storage, refuse storage and the coal preparation plant ancillary area subcategory (Subpart B), the acid or ferruginous mine drainage subcategory (Subpart C), and the alkaline mine drainage subcategory (Subpart D) of the coal mining point source category.

The Agency expects to publish at a future date best available technology economically achievable which will set forth the effluent limitations and guidelines attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives for the coal preparation plant subcategory (Subpart A), the coal storage, refuse storage and the coal preparation plant ancillary area subcategory (Subpart B), the acid or ferruginous mine drainage subcategory (Subpart C), and the alkaline mine drainage subcategory (Subpart D) of the coal mine point source category.

Section 304(c) of the Act requires the Administrator to issue to the States and appropriate water pollution control agencies information on the processes, procedures or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 306 of the Act. The report or "Development Document" referred to below provides, pursuant to section 304(c) of the Act, information on such processes, procedures or operating methods.

(2) *New sources.* Section 306 of the Act requires the achievement by new sources of a Federal standard of performance providing for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

Section 306 also requires the Administrator to propose regulations establishing Federal standards of performance for categories of new sources included in a list published pursuant to section 306 of the Act. Regulations will be proposed at a later date which will set forth the standards of performance applicable to new sources for the coal preparation plant subcategory (Subpart A), the coal storage, refuse storage and the coal preparation plant ancillary area subcategory (Subpart B), the acid or ferruginous mine drainage subcategory (Subpart C), and the alkaline mine drainage subcategory (Subpart D) of the coal mining point source category.

Section 307(b) of the Act requires the establishment of pretreatment standards for pollutants introduced into publicly owned treatment works and 40 CFR 128 establishes that the Agency will propose specific pretreatment standards at the time effluent limitations are established for point source discharges.

Section 307(c) of the Act requires the Administrator to promulgate pretreatment standards for new sources at the same time that standards of performance for new sources are promulgated pursuant to section 306.

(b) Summary and basis of interim final effluent limitations and guidelines for existing sources, proposed effluent limitations and guidelines for existing sources to be achieved by the application of the best available technology economically achievable, proposed standards of performance for new sources, and proposed pretreatment standards for both new and existing sources.

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

The control and treatment technologies existing within each segment were identified. This included an identification of each distinct control and treatment technology, including both in-plant and end-of-process technologies, which is existent or capable of being designed for each segment. It also included an identification of, in terms of the amount of constituents and the chemical, physical, and biological characteristics of pollutants, the effluent level resulting from the application of each of the technologies. The problems, limitations and reliability of each treatment and control technology were also identified. In addition, the nonwater quality environmental impact, such as the effects of the application of such technologies upon other pollution problems, including air, solid waste, noise and radiation were identified. The energy requirements of each control and treatment technology were determined as well as the cost of the application of such technologies.

The information, as outlined above, was then evaluated in order to determine what levels of technology constitute the "best practicable control technology

currently available." In identifying such technologies, various factors were considered. These included the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, nonwater quality environmental impact (including energy requirements) and other factors.

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

(2) Summary of conclusions with respect to the coal preparation plant subcategory (Subpart A), the coal storage, refuse storage and the coal preparation plant ancillary are a subcategory (Subpart B), the acid or ferruginous mine drainage subcategory (Subpart C), and the alkaline mine drainage subcategory (Subpart D) of the coal mining point source category.

(i) *Categorization.* For the purpose of studying waste treatment and effluent limitations the coal mine point source category was initially subcategorized by the established Standard Industrial Classification (SIC) groups applicable to the coal mining industry. These SIC groups were then further subdivided by: geographic location of the mine, type of mine (surface or deep), and size of mine (annual tonnage); all based on anticipated variations in raw waste water. After statistical analysis of the data obtained during the study it was determined that based on waste treatment the coal mining point source category should be divided into four discrete subcategories based on the origin of the waste water, i.e., waste water from the mining activities themselves and waste water from the coal preparation activities, or mining services activities. Waste water from the mining activities themselves was further subdivided by the characteristics of the raw mine drainage. Coal preparation, or mining services activities, were subdivided as to the waste water from the preparation plants themselves and the waste water from coal storage, refuse storage, and the ancillary areas associated with the coal preparation plants.

(1) Subpart A—Coal Preparation Plant. The provisions of this subpart are applicable to discharges resulting from the cleaning or beneficiation of coal of any rank including but not limited to bituminous, lignite, and anthracite.

(2) Subpart B—Coal Storage, Refuse Storage, and the Coal Preparation Plant Ancillary Area. The provisions of this subpart are applicable to discharges which are pumped, siphoned or drained from coal storage, refuse storage and coal preparation plant ancillary areas related to the cleaning or beneficiation of coal of any rank including but not limited to bituminous, lignite and anthracite.

(3) Subpart C—Acid or Ferruginous Mine Drainage. The provisions of this subpart are applicable to acid or ferruginous mine drainage resulting from the mining of coal of any rank, including but not limited to bituminous, lignite, and anthracite.

(4) Subpart D—Alkaline Mine Drainage. The provisions of this subpart are applicable to alkaline mine drainage resulting from the mining of coal of any rank including but not limited to bituminous, lignite, and anthracite.

(ii) *Waste characteristics.* The raw waste characteristics of coal preparation plant process water are highly dependent upon the particular process or recovery technique utilized in the operation. Process techniques generally require an alkaline media for efficient and economic operation, therefore process water does not dissolve significant quantities of the constituents present in the raw coal. The principal pollutant present in coal preparation plant process water is suspended solids. In preparation plants cleaning coal fines, process water contains less suspended solids than process water at coal preparation plants which do not clean or recover coal fines.

The raw waste characteristics of the discharge from coal storage, refuse storage and coal preparation plant ancillary areas are characterized as being generally similar to the raw mine drainage at the mine served by the preparation plant. Geologic and geographic setting of the mine and the nature of the coal mined affect the characteristics of the discharge from coal storage, refuse storage, and the coal preparation plant ancillary areas.

The raw waste characteristics of the waste water discharged from the actual coal mining activities themselves vary significantly. The chemical characteristics of raw mine drainage are determined by local and regional geology of the coal, associated overburden, and mine bottom. Raw mine drainage ranges from grossly polluted to drinking water quality. Major differences were observed between the two classes of raw mine drainage (1. acid or ferruginous, and 2. alkaline) which are generally representative of geographic areas. These differences are unrelated or only indirectly related to mine size (annual tonnage) and mine type (deep or surface). Each class of mine drainage is directly related to the treatment technology required.

Acid or ferruginous mine drainage can be characterized as raw mine drainage requiring neutralization and sedimentation which is acid with high iron concentrations and varying concentration of other metal ions including aluminum, manganese, nickel, and zinc, plus varying concentrations of total suspended solids. Alkaline mine drainage can be characterized as raw mine drainage of generally acceptable quality, not requiring neutralization, but possibly requiring sedimentation to reduce concentration of suspended solids.

Effluent limitations guidelines and standards of performance are estab-

lished to control pollutant parameters based primarily on the following criteria: (1) pollutants which are frequently present in coal mine point source discharges in concentrations deleterious to aquatic organisms; (2) technology exists for the reduction or removal of the pollutant in question; and (3) research data indicates that certain concentrations of pollutants are capable of disrupting an aquatic ecosystem. The following were identified as the pollutants in coal mine drainage, coal storage, refuse storage, and preparation plant ancillary area waste water discharges: acidity, iron, manganese, aluminum, nickel, zinc, and suspended solids. The following were identified as the pollutants in preparation plant waste water discharges: acidity, iron, and suspended solids.

Several other waste water constituents were considered including: total dissolved solids, sulfates, fluorides, strontium, and ammonia. Effluent limitations have not been proposed for ammonia, sulfates, fluoride, and strontium because the level observed in coal mine waste water discharges generally do not warrant concern. Total dissolved solids concentrations in coal mine discharges approach levels capable of disrupting an aquatic ecosystem, but economically feasible technology for achieving substantial reductions in dissolved solids levels does not exist at this time.

(iii) *Origin of waste water pollutants.* Coal preparation plants fall into three general stages, based on degree of cleaning and unit operations. Stage 1 consists of crushing and sizing which are basically dry processes and do not produce a waste water discharge. Stage 2 consists of primary crushing, sizing, gravity separation of coarse coal, dewatering of clean coal and refuse, and removal of coal and refuse fines from process waters. Stage 3 consists of crushing, sizing, gravity separation of all sizes of coal, secondary separation of coal fines or froth flotation, dewatering of clean coal and refuse, heavy media recovery when required, thermal drying of clean coal, and removal of coal and refuse fines from process water. Stages 2 and 3 coal preparation plants use water in the beneficiation processes. Fine coal and mineral particles are suspended in the coal preparation plant process waters, and some minerals associated with the coal and its impurities are dissolved in the coal preparation plant's process water. Additional waste water of a non-contact nature may result from boiler blowdowns and non-contact cooling waters such as bearing cooling water.

The waste water situation evident in the mining segment of the coal industry is unlike that encountered in most other industries. Water enters mines via precipitation, ground water infiltration, and runoff where it may become polluted by contact with materials in the coal, overburden material, or mine bottom. Except for dust control and fire protection, water is not used in the actual mining of coal in the U.S. at the present time. Waste water handling and management

is required, and is a part of most coal mining methods or systems to insure the continuance of the mining operation and to improve the efficiency of the mining operation. This waste water is discharged from the mine as mine drainage. Mine drainage may be polluted and require treatment before it can be discharged to navigable waters. In addition to handling and treating often massive volumes of waste water during actual mining operations or coal loading, coal mine operators are faced with the same burden during idle periods. Mine drainage may continue indefinitely after all mining operations have ceased if proper mining methods, control technology and reclamation is not employed, or even increase in intensity after mine closure if proper mine drainage control technology is not employed. Control of mine drainage after mine abandonment is not included in the interim final regulation although techniques are described in the Development Document, referenced below, which can control or ameliorate mine drainage after mine closure and all activities associated with the mine have ceased.

Water enters coal storage, refuse storage, and coal preparation plant ancillary areas via precipitation, wash down, and runoff where it comes into contact with coal or coal refuse. The waste water discharges from coal storage, refuse storage, and coal preparation plant ancillary areas contain pollutants similar to the pollutants discharged by the mine served by the preparation plant. As with the coal mining segment of the industry, waste water handling from coal storage, refuse storage, and coal preparation plant ancillary areas continue during idle periods; and may continue indefinitely from refuse storage after preparation plant closure if proper control technology is not employed, although these control technologies are not required as part of these interim final regulations.

These waste waters from the mining segment and the coal storage, refuse storage and coal preparation ancillary areas of the coal mining industry are unrelated, or only indirectly related, to production quantities. Therefore, raw waste loadings are expressed in terms of concentration rather than units of production.

(iv) *Treatment and control technology.* Waste water treatment and control technologies have been studied for each subcategory of the industry to determine what is the best practicable control technology currently available.

Waste water control technology includes techniques employed before, during and after the actual mining operation to reduce or eliminate adverse environmental effects resulting from waste water discharges from coal mine point sources. Control technology as discussed in the Development Document, referenced below, has been categorized as to control technology related to surface mining, underground mining, and coal preparation. Surface mine pollution control technology is divided into two major categories—mining technology (specific mining techniques) and final waste

water pollution control technology (reclamation of land areas disturbed by mining). Underground mine pollution control technology is divided into methods of reducing water influx into mine workings, and preplanned flooding on mine closure. Coal preparation pollution control technology is divided into surface water control and final waste water pollution control technology at preparation plant refuse disposal areas (reclamation).

Waste water treatment technology is categorized in the Development Document, referenced below, as to treatment technology for coal preparation plant process waste water and treatment technology for the two classes of mine drainage. Coal preparation plant process waste water treatment consists primarily of clarification techniques for suspended solids removal including thickeners, flocculation, settling basins, vacuum filtration, and pressure filtration. Of the more than 180 coal preparation facilities utilizing wet cleaning processes investigated during the study (either through site visits or industry supplied data), over 100 located in various terrain and geographic locations had closed water circuits. Treatment technology for acid or ferruginous mine drainage includes flow equalization, acidity neutralization and precipitation of insoluble metal hydroxides, ferrous iron oxidation, and suspended solids removal. Surface holding ponds or underground sumps are employed to equalize the flow of mine drainage before treatment. Mineral acidity in the raw mine drainage is neutralized with an alkali, usually hydrated lime, which removes iron, manganese, and other soluble metals through the formation of their insoluble hydroxides. When iron is present in raw mine drainage in the ferrous form, usual practice is to provide aeration facilities for oxidation to the ferric state. Suspended solids are formed as a result of the chemical treatment. Both earthen settling basins and mechanical clarifiers are used for removal of these suspended solids. Treatment technology for alkaline mine drainage consists of solids removal when required.

The proper management of solid wastes resulting from pollution control systems must be practiced. Pollution control technologies generate many different amounts and types of solid wastes and liquid concentrates through the removal of pollutants. These substances vary greatly in their chemical and physical composition and may be either hazardous or non-hazardous. A variety of techniques may be employed to dispose of these substances depending on the degree of hazard.

If thermal processing (incineration) is the choice for disposal, provisions must be made to ensure against entry of hazardous pollutants into the atmosphere. Consideration should also be given to recovery of materials of value in the wastes.

For those waste materials considered to be non-hazardous where land disposal is the choice for disposal, practices simi-

lar to proper sanitary landfill technology may be followed. The principles set forth in the EPA's Land Disposal of Solid Wastes Guidelines 40 CFR 241 may be used as guidance for acceptable land disposal techniques.

For those waste materials considered to be hazardous, disposal will require special precautions. In order to ensure long-term protection of public health and the environment, special preparation and pretreatment may be required prior to disposal. If land disposal is to be practiced, these sites must not allow movement of pollutants to either ground or surface waters. Sites should be selected that have natural soil and geological conditions to prevent such contamination or, if such conditions do not exist, artificial means (e.g. liners) must be provided to ensure long-term protection of 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.

(v) *Cost estimates for control of waste water pollutants.* The estimated capital investment required for coal mining facilities to meet interim final guidelines range between \$3,500 and \$76,250 depending on size and type of mine. Annual operating costs of effluent treatment facilities are expected to range between \$3,425 and \$75,500. All coal mine point sources included in the study to support the Development Document, referenced below, as a minimum, were in compliance; however, some coal mining facilities may not be in compliance and may have to incur these costs.

(vi) *Energy requirements and non-water quality environmental impacts.* Energy requirements for interim final best practicable control technology currently available are low. The main use of energy is for pumps, mixers, and control instruments. Wherever feasible gravity flow is used at coal preparation plants and mine drainage treatment facilities. Mine dewatering is considered an inherent part of the mining method or system.

(vii) *Economic impact analysis.* These guidelines are not expected to significantly affect prices, production, employment or the balance of trade. In most cases, coal mines and preparation plants should presently be achieving the interim final limitation of pH 6.0 to 9.0 in order to comply with State requirements. However, even if a mining operation had to install treatment as a result of these limitations, the economic impact is expected to be minimal. Annual effluent treatment costs are estimated to be .3% to 1.6% of annual operating costs, depending on the size and type of mine. Investment costs for treatment facilities, if necessary, is not anticipated to exceed 3.2% of original capital investment in the mining operation.

Executive Order 11821 (November 27, 1974) requires that major proposals for legislation and promulgation of regula-

tions and rules by Agencies of the executive branch be accompanied by a statement certifying that the inflationary impact of the proposal has been evaluated.

OMB Circular A-107 (January 28, 1975) prescribes guidelines for the identification and evaluation of major proposals requiring preparation of inflationary impact certifications. The circular provides that during the interim period prior to final approval by OMB of criteria developed by each Agency, the Administrator is responsible for identifying those regulations which require evaluation and certification. The Administrator has directed that all regulatory actions which are likely to result in capital investment exceeding \$100 million or annualized costs in excess of \$50 million will require certification.

As the Agency's analysis of the potential economic impacts of these regulations indicates, the capital investment and annualized costs associated with compliance are not estimated to exceed these amounts. However, the Agency has reviewed and analyzed the projected effect on the prices and economics of the industry as summarized above.

The report entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Coal Mining Point Source Category" details the analysis undertaken in support of the interim final regulation set forth herein and is available for inspection in the EPA Public Information Reference Unit, Room 2404, Waterside Mall, Washington, D.C., at all EPA regional offices, and at State water pollution control offices. A supplementary analysis prepared for EPA of the possible economic effects of the regulation is also available for inspection at these locations. Copies of both of these documents are being sent to persons or institutions affected by the proposed regulation or who have placed themselves on a mailing list for this purpose (see EPA's Advance Notice of Public Review Procedures, 38 FR 21202, August 6, 1973). An additional limited number of copies of both reports are available. Persons wishing to obtain a copy may write the Environmental Protection Agency, Effluent Guidelines Division, Washington, D.C. 20460, Attention: Distribution Officer, WH-552.

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

(c) *Summary of public participation.* Prior to this publication, the agencies and groups listed below were consulted and given an opportunity to participate in the development of effluent limitations guidelines and standards proposed for the coal mining point source category.

All participating agencies have been informed of project developments. An initial draft of the Development Document was sent to all participants and comments were solicited on that report. The following are the principal agencies and groups consulted: (1) Effluent Standards and Water Quality Information Advisory Committee (established under section 515 of the Act); (2) all State and U.S. Territory Pollution Control Agencies; (3) U.S. Department of the Interior; (4) U.S. Department of Agriculture; (5) U.S. Department of Health, Education, and Welfare; (6) U.S. Department of Transportation; (7) American Electric Power Company; (8) Save Our Cumberland Mountains Association; (9) Campaign Clean Water; (10) U.S. Water Resources Council; (11) National Coal Association; (12) American Society of Mechanical Engineers; (13) The Conservation Foundation; (14) Businessmen for the Public Interest; (15) Environmental Defense Fund; (16) American Society of Civil Engineers; (17) National Wildlife Federation; (18) American Mining Congress; (19) Bituminous Coal Research; (20) Independent Miners Association; (21) Society of Mining Engineers; and (22) National Independent Coal Association.

The following responded with written comments: U.S. Department of the Interior; U.S. Environmental Protection Agency, Region III; American Electric Power Company; Department of Agriculture, Soil Conservation Service; Illinois Environmental Protection Agency; State of Maryland, Water Resources Administration; State of New Mexico Environmental Improvement Agency; Save Our Cumberland Mountains; State of West Virginia Department of Natural Resources; Campaign Clean Water, Charleston, West Virginia; Effluent Standards and Water Quality Information Advisory Committee; Department of Health, Education and Welfare; State of Delaware, Department of Natural Resources and Environmental Control; United States Water Resources Council; Trust Territory of the Pacific Islands; State of Florida, Department of Pollution Control; U.S. Department of Transportation; North Carolina Department of Natural and Economic Resources; MITRE Corporation; and the National Coal Association.

The primary issues raised in the draft development document and the treatment of these issues herein are as follows:

(1) A commenter stated that provisions should be made in setting standards for effluent quality during the start of operations at a new mine site.

Regulations for the coal mining industry do take into consideration the factors related to mining operations start ups.

(2) Commenters suggested the use of turbidity rather than total suspended solids as a control for surface mines. Turbidity is quickly determinable in the field, giving the mine operator opportunity to take corrective action sooner if permit conditions are being violated.

Turbidity is an indicator of suspended solids and as such can be used to determine quickly the effectiveness of suspended solids removal. The turbidity test is specific to the type of solids in the water sample. Because the type of solids may change, turbidity will not always indicate accurately the level of solids present in the waste water.

(3) One commenter suggested that the subcategories "acid or ferruginous" and "alkaline" should be replaced by "underground" and "surface" because active deep mines sometimes change from alkaline to acid over a few months period, and some mines may be acid at one location and alkaline at another.

Deep mines and surface mines are equally subject to change in raw mine drainage characteristics during the life of the mine and may go from alkaline to acid or ferruginous. There may be mines which are on the border line of the two classes of mine drainage and may change, or fluctuate, during the life of the mine. The two classes of mine drainage are generally related to geographic locations, and are directly related to waste treatment technology.

(4) It was stated that the suggested limitation on dissolved iron is not necessary because available data indicates that when total iron concentration is equal to or below 3.5 mg/l, dissolved iron is always below 0.3 mg/l.

A three month sampling and analysis of waste waters determined that the dissolved iron level does not always remain below the 0.3 mg/l level when total iron is less than or equal to 3.5 mg/l.

(5) A commenter indicated that the effect of un-ionized ammonia on aquatic life can be serious and that the rejection of ammonia as a significant pollutant should be reconsidered.

Ammonia was not detected in sufficient concentrations to warrant concern at this time. The effluent quality information collected during the study of the coal mining industry determined that the concentration of un-ionized ammonia present in industry waste waters was not sufficient to require control.

(6) One commenter suggested that the stringent limits and standards for surface mine discharges in the draft report may not be appropriate because surface mining is a mobile operation in which the active mine area continually changes location.

A mine includes the area "used in and resulting from" the work of extracting coal from its natural deposit. The draft development document supports the position that the limitations applicable to surface mining are achievable and are being achieved today.

(7) Commenters indicated that the "no discharge" limitation for coal preparation plants may not be achievable for all plants because of such factors as existing facilities, terrain, precipitation periods, etc.

Over 100 preparation plants in various geographic locations and terrain of the 180 preparation plants included in this study had, or reported, "no discharge." An allowance for discharge is made based

on the design of a facility to handle all process water plus runoff from 10 year 24 hour storm.

(8) One commenter indicated that the analytical data supporting the suggested limitations was inadequate: grab samples were used, and additional sampling is necessary to determine seasonal variations in effluents from treatment systems.

Winter-spring sampling completed at selected mine sites after distribution of the draft report verified that there are insignificant seasonal variations.

(9) One commenter stated that the suggested limits for daily maximums should be three times the thirty day average rather than two times.

The daily maximum allowable discharges of pollutants were determined by a statistical analysis of the data generated in the study.

(10) One commenter indicated that the effluent limitations development study does not justify the conclusion that there is no significant difference between untreated mine drainage from surface and underground mining operations in similar geologic settings.

Variations within the two classes of raw mine drainage may exist, but study confirms that a mine in a specific geographic location with specific geologic conditions will have an alkaline drainage or acid or ferruginous drainage whether the mining method utilized is deep or surface.

(11) A commenter indicated that if the sampling of strip mines presented in the draft report were not taken during periods of rainfall, further sampling should be done during rainfall to confirm that the suggested technology is adequate to achieve the required control.

Additional sampling and analysis conducted during the 1975 winter-spring period confirmed that the suggested technology was adequate.

(12) One commenter indicated that the pollutant content of supply water be taken into consideration when determining permit limitations.

The net-gross question is covered in another regulation (40 CFR Part 125). In summary the regulation states that if an applicant for an NPDES permit can establish that he is fundamentally different, he may be given an allowable discharge based on net removal limits.

(13) One commenter said that the proposed limits and standards for total iron would require stringent plant design and operation and higher costs than indicated in the draft report.

Costs used in the draft report are actual costs reported by industry which were updated and adjusted to September 1974 costs using *Engineering News Record Construction Index*.

(14) A commenter indicated that the total iron limitations recommended in the contractors draft report are too high, in that a state regulatory agency sets a standard approximately 50% of limits in the report. The commenter also suggested a limit be established for the discharge of sulfates.

The limitations presented in the draft development document were developed

under the directions and constraints of the Water Pollution Control Act Amendments of 1972. Technical and economic considerations resulted in the suggested best practicable control technology.

(15) One commenter voiced concern that the Agency's contractor did not consult with public interest groups during the course of the contract study.

The contractor's draft report was distributed to a number of public interest groups for the purpose of soliciting their comments. Their comments are taken into consideration before promulgation. A list of groups that received the document is listed elsewhere in this preamble.

(16) One commenter stated that "certain heavy metals might still be released in harmful quantities despite implementation of these guidelines."

The constraints, technical and economic, established by "the Act" make it infeasible to establish a no discharge limitation for portions of this industry. The presence of heavy metals in the discharges was not considered to be significant enough to justify national limitations. Local water quality requirements may justify application of more restrictive limitations.

(17) One commenter indicated that the presence of total dissolved solids, sodium, and fluorides may cause potential health and livestock problems in certain areas of the country and suggested that limits be proposed.

The contractor's draft development document determined that the amounts of the above pollutants present in industry discharges were not sufficient in enough specific situations to justify the establishment of national standards. State or local pollution control agencies have the authority to establish limits on parameters other than those included in effluent limitations guidelines when local water quality requirements warrant.

(18) A commenter stated that settleable solids should be controlled by the suggested effluent limitations in order to prevent solids from settling on the stream bed.

The contractor's draft development document suggested limits on total suspended solids. This limitation effectively controls the discharge of settleable solids from a point source.

(19) A commenter recommended that a limitation on aluminum should be imposed only in special cases because excess concentrations of aluminum are found only in specific locations.

The objective of "the Act" is the establishment of national standards. In specific locations where aluminum is not present in discharges from coal mines, the limitation on aluminum will not result in the application of unnecessary control technology or increased costs. The monitoring requirements will be determined when individual permit conditions are established.

(20) One commenter stated that reclamation procedures for surface mines and preparation plants addressed in the draft report, while helpful background

information, "should be included in reclamation laws presently being enforced or enacted" to avoid duplication of enforcement.

Reclamation and revegetation are commonly recognized as water pollution control techniques of substantial value and are in general use. In this light they are discussed in substantial detail in the Development Document. However the application of reclamation or revegetation is not required by this regulation as the technologies used as the basis for BPT regulation is end-of-pipe treatment only.

The Agency is subject to an order of the United States District Court for the District of Columbia entered in *Natural Resources Defense Council v. Train et al.* (Cv. No. 1609-73) which requires the promulgation of regulations for this industry category not later than October 6, 1975. This order also requires that such regulations become effective immediately upon publication. In addition, it is necessary to promulgate regulations establishing limitations on the discharge of pollutants from point sources in this category so that the process of issuing permits to individual dischargers under section 402 of the Act is not delayed.

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

Interested persons are encouraged to submit written comments. Comments should be submitted in triplicate to the Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460. Attention: Distribution Officer, WH-552. Comments on all aspects of the regulation are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which are available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data are essential to the amendment or modification of the regulation. In the event comments address the approach taken by the Agency in establishing an effluent limitation or guideline EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301 and 304(b) of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Public Information Reference Unit, Room 2404, Waterside Mall, 401 M Street, S.W., Washington D.C. A copy of preliminary draft contractor reports, the Development Document and economic study referred to above, and certain sup-

plementary materials supporting the study of the industry concerned will also be maintained at this location for public review and copying. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

All comments received on or before November 17, 1975, will be considered. Steps previously taken by the Environmental Protection Agency to facilitate public response within this time period are outlined in the advance notice concerning public review procedures published on August 6, 1973 (38 FR 21202). In the event that the final regulation differs substantially from the interim final regulation set forth herein the Agency will consider petitions for reconsideration of any permits issued in accordance with these interim final regulation.

The Agency has completed major technical studies on which to base the establishment of detailed effluent standards for coal mining. However, the Agency has not completed economic impact or inflationary impact analyses relative to this complete control regulation. For this reason only one parameter—pH—is being regulated by this interim final regulation.

Set forth below are limitations based on best practicable control technology for each of the subcategories as are indicated by the technical studies. There is a strong presumption that these limitations if promulgated, would not cause an undue economic hardship on the coal industry. Unless the economic impact studies reveal unexpectedly gross impact, the Agency anticipates proposal of these limitations at an early date.

**SUBPART A—COAL PREPARATION PLANT SUBCATEGORY**

The effluent limitation based on best practicable control technology, set forth in the Development Document for this subcategory is:

No discharge of process water.

**SUBPART B—COAL STORAGE, REFUSE STORAGE, AND COAL PREPARATION PLANT ANCILLARY AREAS SUBCATEGORY**

The effluent limitation based on best practicable control technology set forth in the Development Document for this subcategory is:

| Effluent characteristic | Effluent limitations                         |   |
|-------------------------|--|---|
|                         | Maximum for any 1 day (milligrams per liter) | Average of daily values for 30 consecutive days shall not exceed (milligrams per liter) |
| Iron, total.....        | 7.0.....                                     | 3.5   |
| Iron, dissolved.....    | 0.60.....                                    | 0.30  |
| Aluminum, total.....    | 4.0.....                                     | 2.0   |
| Manganese, total.....   | 4.0.....                                     | 2.0   |
| Nickel, total.....      | 0.40.....                                    | 0.20  |
| Zinc, total.....        | 0.40.....                                    | 0.20  |
| TSS.....                | 70.....                                      | 35  |
| pH.....                 | Within the range 6.0 to 9.0.                 |   |

**SUBPART C—ACID OR FERRUGINOUS MINE DRAINAGE SUBCATEGORY**

The effluent limitation based on best practicable control technology set forth in the Development Document for this subcategory is:

| Effluent characteristic | Effluent limitations                         |   |
|-------------------------|--|---|
|                         | Maximum for any 1 day (milligrams per liter) | Average of daily values for 30 consecutive days shall not exceed (milligrams per liter) |
| Iron, total.....        | 7.0.....                                     | 3.5   |
| Iron, dissolved.....    | 0.60.....                                    | 0.30  |
| Aluminum, total.....    | 4.0.....                                     | 2.0   |
| Manganese, total.....   | 4.0.....                                     | 2.0   |
| Nickel, total.....      | 0.40.....                                    | 0.20  |
| Zinc, total.....        | 0.40.....                                    | 0.20  |
| TSS.....                | 70.....                                      | 35  |
| pH.....                 | Within the range 6.0 to 9.0.                 |   |

**SUBPART D—ALKALINE MINE DRAINAGE SUBCATEGORY**

The effluent limitation based on best practicable control technology set forth in the Development Document for this subcategory is:

| Effluent characteristic | Effluent limitations                         |   |
|-------------------------|--|---|
|                         | Maximum for any 1 day (milligrams per liter) | Average of daily values for 30 consecutive days shall not exceed (milligrams per liter) |
| Iron, total.....        | 7.0.....                                     | 3.5   |
| Iron, dissolved.....    | 0.60.....                                    | 0.30  |
| Aluminum, total.....    | 4.0.....                                     | 2.0   |
| Manganese, total.....   | 4.0.....                                     | 2.0   |
| Nickel, total.....      | 0.40.....                                    | 0.20  |
| Zinc, total.....        | 0.40.....                                    | 0.20  |
| TSS.....                | 70.....                                      | 35  |
| pH.....                 | Within the range 6.0 to 9.0.                 |   |

In addition to encouraging written comments on the interim final regulation, the Agency would like to encourage written comments on the outlined specific effluent limitations for the subcategories of the coal mine point source category above. Such comments should be submitted following the procedure for comments addressed to the interim final regulation.

It is recognized that coal mining may result in long term water quality degradation caused by mine drainages continuing after mining activities have been concluded. In many cases the pollution is worse than that from an active mine. The Agency is aware of the problem and is considering possible applications of Pub. L. 92-500 to the amelioration of this aspect of coal mining related pollution and may provide additional guidance to control this facet of the pollution problem at a future date.

In consideration of the foregoing, 40 CFR Part 434 is hereby established as set forth below.

Dated: October 6, 1975.

RUSSELL E. TRAIN,  
Administrator.

Part 434 is added as set forth below:

**Subpart A—Coal Preparation Plant Subcategory**

- 434.10 Applicability; description of the coal preparation plant subcategory.
- 434.11 Specialized definitions.
- 434.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

434.13—434.16 [Reserved]

**Subpart B—Coal Storage, Refuse Storage, and Coal Preparation Plant Ancillary Area Subcategory**

- 434.20 Applicability; description of the coal storage, refuse storage, and coal preparation plant ancillary area subcategory.
- 434.21 Specialized definitions.
- 434.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

434.23—434.26 [Reserved]

**Subpart C—Acid or Ferruginous Mine Drainage Subcategory**

- 434.30 Applicability; description of the acid acid or ferruginous mine drainage subcategory.
- 434.31 Specialized definitions.
- 434.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

434.33—434.36 [Reserved]

**Subpart D—Alkaline Mine Drainage Subcategory**

- 434.40 Applicability; description of the alkaline mine drainage subcategory.
- 434.41 Specialized definitions.
- 434.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

434.43—434.46 [Reserved]

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

**Subpart A—Coal Preparation Plant Subcategory**

§ 434.10 Applicability; description of the coal preparation plant subcategory.

The provisions of this subpart are applicable to discharges resulting from the cleaning or beneficiation of coal of any rank including but not limited to bituminous, lignite, and anthracite.

§ 434.11 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 401 shall apply to this subpart.

(b) The term "coal preparation plant" shall mean a facility where coal is crushed, screened, sized, cleaned, dried, or otherwise prepared and loaded prior to the final handling or sizing in transit to or at a consuming facility.

(c) The term "ten year 24-hour precipitation event" shall mean the maximum 24-hour precipitation event with a probable re-occurrence interval of once in 10 years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, and subsequent amendments or equivalent regional or rainfall probability information developed therefrom.

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

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

(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutant 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<br>characteristic | Effluent<br>limitations      |
| pH                         | Within the range 6.0 to 9.0. |

(b) Any untreated overflow from facilities designed, constructed, and operated to contain all process generated

waste water and the surface runoff to the treatment facility resulting from a 10 year 24 hour precipitation event shall not be subject to the limitations set forth in paragraph (a) of this section.

§ 434.13—434.16 [Reserved]

Subpart B—Coal Storage, Refuse Storage, and Coal Preparation Plant Ancillary Area Subcategory

§ 434.20 Applicability; description of the coal storage, refuse storage, and coal preparation plant ancillary area subcategory.

The provisions of this subpart are applicable to discharges which are pumped, siphoned or drained from coal storage, refuse storage and coal preparation plant ancillary areas related to the cleaning or beneficiation of coal of any rank including but not limited to bituminous, lignite and anthracite.

§ 434.21 Specialized definitions.

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

(b) The term "coal preparation plant" shall mean a facility where coal is crushed, screened, sized, cleaned, dried, or otherwise prepared and loaded prior to the final handling or sizing in transit to or at a consuming facility.

(c) The term "coal preparation plant ancillary area" shall mean the areas associated with a coal preparation plant including: the coal preparation plant yards, access roads, and other areas immediately associated with a coal preparation plant where coal or coal refuse, either purposefully or accidentally is allowed to come in contact with precipitation runoff or plant washdown.

(d) The term "ten year 24-hour precipitation event" shall mean the maximum 24-hour precipitation event with a probable re-occurrence interval or once in 10 years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, and subsequent amendments or equivalent regional or rainfall probability information developed therefrom.

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

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other inter-

ested 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.

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

| Effluent characteristic | Effluent limitations         |   |
|-------------------------|------------------------------|---|
|                         | Maximum for any 1 day        | Average of daily values for 30 consecutive days shall not exceed— |
| Iron, total.....        | (1)                          | (1)   |
| Iron, dissolved.....    | (1)                          | (1)   |
| Aluminum, total.....    | (1)                          | (1)   |
| Manganese, total.....   | (1)                          | (1)   |
| Nickel, total.....      | (1)                          | (1)   |
| Zinc, total.....        | (1)                          | (1)   |
| TSS.....                | (1)                          | (1)   |
| pH.....                 | Within the range 6.0 to 9.0. |   |

<sup>1</sup> Numerical value to be determined.

(b) Any untreated overflow from facilities designed, constructed, and operated to treat the process waste water and the runoff from the coal preparation plant ancillary area resulting from a 10 year 24-hour precipitation event shall not be subject to the limitations set forth in paragraph (a) of this section.

§ 434.23—434.26 [Reserved]

Subpart C—Acid or Ferruginous Mine Drainage Subcategory

§ 434.30 Applicability; description of the acid or ferruginous mine drainage subcategory.

The provisions of this subpart are applicable to acid or ferruginous mine drainage resulting from the mining of coal of any rank including but not limited to bituminous, lignite, and anthracite.

§ 434.31 Specialized definitions.

For the purpose of this subpart:

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

(b) The term "coal mine" shall mean an active mining area of land with all property placed upon, under or above the surface of such land, used in or resulting from the work of extracting coal from its natural deposits by any means or method including secondary recovery of coal from refuse or other storage piles derived from the mining, cleaning, or preparation of coal.

(c) The term "mine drainage" shall mean any water drained, pumped or siphoned from a coal mine.

(d) The term "ten year 24-hour precipitation event" shall mean the maximum 24-hour precipitation event with a probable re-occurrence interval or once in 10 years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, and subsequent amendments or equivalent regional or rainfall probability information developed therefrom.

(e) The term "acid or ferruginous mine drainage" shall mean mine drainage which before any treatment either has a pH of less than 6.0 or a total iron concentration of more than 10 mg/l.

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

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

the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

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

| Effluent characteristic | Effluent limitations            |   |
|-------------------------|---------------------------------|---|
|                         | Maximum for any 1 day           | Average of daily values for 30 consecutive days shall not exceed— |
| Iron, total.....        | (1).....                        | (1)   |
| Iron, dissolved.....    | (1).....                        | (1)   |
| Aluminum, total.....    | (1).....                        | (1)   |
| Manganese, total.....   | (1).....                        | (1)   |
| Nickel, total.....      | (1).....                        | (1)   |
| Zinc, total.....        | (1).....                        | (1)   |
| TSS.....                | (1).....                        | (1)   |
| pH.....                 | Within the range<br>6.0 to 9.0. |   |

<sup>1</sup> Numerical value to be determined.

(b) Any untreated overflow from facilities designed, constructed and operated to treat the mine drainage and the runoff at the treatment facility resulting from a 10 year 24-hour precipitation event shall not be subject to the limitations set forth in paragraph (a) of this section.

§ 434.33-434.36 [Reserved]

Subpart D—Alkaline Mine Drainage Subcategory

§ 434.40 Applicability; description of the alkaline mine drainage subcategory.

The provisions of this subpart are applicable to alkaline mine drainage resulting from the mining of coal of any rank including but not limited to bituminous, lignite, and anthracite.

§ 434.41 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 "coal mine" shall mean an active mining area of land with all property placed upon, under or above the surface of such land, used in or resulting from the work of extracting coal from its natural deposits by any means or method and secondary recovery of coal from refuse or other storage piles derived from the mining, cleaning, or preparation of coal.

(c) The term "mine drainage" shall mean any water drained, pumped or siphoned from a coal mine.

(d) The term "ten year 24-hour precipitation event" shall mean the maximum 24-hour precipitation event with a probable re-occurrence interval or once in 10 years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, and subsequent amendments or equivalent regional or rainfall probability information developed therefrom.

(e) The term "alkaline mine drainage" shall mean mine drainage which before any treatment has a pH of more than 6.0 and with a total iron concentration of less than 10 mg/l.

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

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

(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutant 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

| Effluent characteristic | Effluent limitations            |   |
|-------------------------|---------------------------------|---|
|                         | Maximum for any 1 day           | Average of daily values for 30 consecutive days shall not exceed— |
| Iron, total.....        | (1)-----                        | (1)   |
| Iron, dissolved.....    | (1)-----                        | (1)   |
| Aluminum, total.....    | (1)-----                        | (1)   |
| Manganese, total.....   | (1)-----                        | (1)   |
| Nickel, total.....      | (1)-----                        | (1)   |
| Zinc, total.....        | (1)-----                        | (1)   |
| TSS.....                | (1)-----                        | (1)   |
| pH.....                 | Within the range<br>6.0 to 9.0. |   |

<sup>1</sup> Numerical value to be determined.

(b) Any untreated overflow from facilities designed, constructed and operated to treat the mine drainage and the runoff at the treatment facility resulting from a 10 year 24 hour precipitation event shall not be subject to the limitations set forth in paragraph (a) of this section.

§ 434.43-434.46 [Reserved]

[FR Doc.75-27898 Filed 10-16-75;8:45 am]