

**FEDERAL REGISTER: 47 FR 47216 (October 22, 1982)**

DEPARTMENT OF THE INTERIOR

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSM)

30 CFR Parts 816 and 817

Surface Coal Mining and Reclamation Operations; Permanent Regulatory Program;  
Water Quality Standards and Effluent Limitations

ACTION: Final rule.

**SUMMARY:** The Office of Surface Mining Reclamation and Enforcement (OSM) is amending its rules relating to the quality of effluents discharged from areas disturbed by surface coal mining and reclamation operations. The changes in the effluent limitation rules are necessary because the Surface Mining Control and Reclamation Act of 1977 (the Act) requires that the effluent limitations established by OSM be the same as those established by the Environmental Protection Agency, which recently promulgated final revised rules for the coal mining point source category. Consequently, OSM is required to promulgate new rules. The new rules adopts the EPA effluent limitations by reference to 40 CFR Part 434. The requirement of the Act that discharges from disturbed areas be in compliance with State laws remains unchanged.

The other issues addressed in the July 2, 1981, proposal to revise OSM's sedimentation pond and treatment facility standards will be finalized in a separate final rule.

EFFECTIVE DATE: November 22, 1982.

FOR FURTHER INFORMATION CONTACT: Jose R. del Rio, P.E., Civil Engineer, Division of Engineering Analysis, Office of Surface Mining, U.S. Department of the Interior, 1951 Constitution Avenue, NW., Washington, DC. 20240; (202) 343-4022.

**SUPPLEMENTARY INFORMATION:**

- I. Background.
- II. Discussion of Comments and Rules Adopted.
- III. Procedural Matters.
- IV. References cited.

**I. BACKGROUND.**

**A. GENERAL**

OSM and the U.S. Environmental Protection Agency (EPA) have worked together in the preparation of the proposed and final effluent limitation rules and have reviewed and relied upon the same technical data, including actual field studies on the performance of many sedimentation ponds. The technical data supporting these rules are described in detail in the preamble to EPA's proposed and final rules.

**B. RULEMAKING HISTORY**

Under the Federal Water Pollution Control Act Amendments of 1972 (subsequently know as the Clean Water Act), EPA was required to issue effluent standards, pretreatment standards, and new source performance standards for certain industrial discharges. On October 17, 1975, EPA proposed regulations adding Part 434 to Title 40 of the Code of Federal Regulations. *40 FR 48830*. These regulations, with subsequent amendments, established effluent limitations guidelines based on the use of the best practicable control technology currently available (BPT) for existing sources in the coal mining point source category. These were followed, on April 26, 1977, by final BPT effluent limitations guidelines for this category. *42 FR 21380*.

On September 19, 1977, EPA published proposed standards of performance for new sources (NSPS) for the coal mining point source category based on application of the best available demonstrated control technology (BAT). *42 FR*

46932. On January 12, 1979, EPA promulgated final NSPS for this category. *44 FR 2586*.

On December 13, 1977, OSM published initial program rules which contained effluent limitations for surface coal mining and reclamation operations. *42 FR 62639*. On March 13, 1979, OSM published permanent program rules which contained effluent limitations for surface coal mining and reclamation operations. *44 FR 15312*. 30 CFR 816.42 applied to surface mining activities, and 30 CFR 817.42 applied to underground mining activities. The major components of these regulations were the imposition of effluent limitations and the requirement that all drainage from minesites be passed through sedimentation ponds. In addition, OSM specified sedimentation pond design criteria, in Sections 816.46 and 817.46. Both of these rulemaking actions were subjected to court challenges, as well as to substantial criticism.

To check the validity of OSM's sedimentation pond design criteria in relation to the total suspended solids (TSS) effluent limitations, OSM and EPA commissioned two studies which were made available in August 1979. These were "Evaluation of Performance Capability of Surface Mine Sediment Basins," prepared by Skelly and Loy, and "Evaluation of Sedimentation Pond Design Relative to Capacity and Effluent Discharge," by D'Appolonia Consulting Engineers, Inc. On September 21, 1979, the Joint National Coal Association/American Mining Congress Committee on Surface Mining Regulations (NCA/AMC) petitioned OSM to suspend the TSS effluent limitations and the sedimentation pond design criteria, and consider those regulations in light of the new studies.

On December 31, 1979, OSM suspended the major precipitation-event exemption from the effluent limitations in both the initial and permanent program regulations. *44 FR 77447*. In its place, OSM announced that it would grant relief from EPA's effluent limitations according to EPA's major precipitation-event exemption under the coal mining point-source category. See 40 CFR 434.22(c), 434.25(c), 434.32(b), 434.35(b), 434.42(b) and 434.45(b). (See *44 FR 76788*, December 28, 1979, for EPA's major precipitation-event exemption under the coal mining point source category.) Also, in the December 31, 1979, notice, OSM announced its intent to commence rulemaking to establish revised effluent limitations during rainfall events and to establish revised sedimentation pond design criteria. *44 FR 77456*.

Two significant court decisions relating to these issues were rendered in May 1980. The first, on May 2, was by the U.S. Court of Appeals for the District of Columbia, in *In re: Surface Mining Regulation Litigation*, *627 F. 2d 1346 (D.C. Cir. 1980)*. In that decision, the Court of Appeals ruled that OSM may not alter the variances and exemptions adopted by EPA, under the Federal Clean Water Act, by promulgating more stringent provisions for effluent discharges from surface coal mining operations. The second was on May 16, in which the U.S. District Court for the District of Columbia ruled that OSM did not have a sufficient record upon which to base its application of the same effluent limitations both to actively mined areas and areas under reclamation. *In re: Permanent Surface Mining Regulation Litigation*, No. 79-1144. In compliance with this ruling, OSM published a notice partially suspending Sections 816.42(a) (1) and (7) and 817.42(a) (1) and (7). *45 FR 51547*, August 4, 1980. These rules were suspended to the extent that they required the runoff from the reclaimed area to meet the same effluent limitations as those imposed on the active mining area.

On January 13, 1981, EPA published proposed best available technology economically achievable (BAT) effluent limitations and revisions to the coal mining point-source effluent limitations guidelines for existing sources and new-source performance standards. *46 FR 3136*. This proposal was subsequently amended on May 29, 1981. *46 FR 28873*. On July 2, 1981, OSM proposed rules which paralleled EPA's proposed effluent limitation rulemaking and which addressed the other issues raised in its December 31, 1979, notice of intent. *46 FR 34784*.

OSM is publishing these final rules contemporaneously with EPA's publication of its final effluent limitation guidelines for existing sources and new-source performance standards for the coal mining point-source category.

In this final rule, OSM is revising 30 CFR 816.42 and 817.42 by adopting EPA's final effluent limitations by reference. Other subjects covered in the July 2, 1981, proposed rule, including standards for sedimentation ponds and treatment facilities, will be finalized in a separate final rule.

Public hearings were held on the proposed rule on the following dates at the following locations: (1) July 14, 1981, Indianapolis, IN; (2) July 16, 1981, Lexington, KY; (3) July 21, 1981, Charleston, WV; (4) July 23, 1981, Washington, D.C.; (5) July 28, 1981, Kansas City, MO; (6) July 30, 1981, Denver CO. A total of 27 persons testified at these hearings. A summary of the hearings is on file in the OSM Administrative Record.

A 60-day comment period was held on the proposed rule from July 2, 1981, to September 3, 1981. A subsequent Federal Register notice, on May 13, 1982, providing notice of the preparation of a supplemental Environmental Impact Statement (EIS) for the permanent regulatory program reopened the public comment period until further notice. *47 FR 20631*. On July 13, 1982, a notice was issued indicating that those portions of Sections 816.42 and 817.42 which parallel EPA's effluent limitation rulemaking would not be analyzed in OSM's supplemental EIS. *47 FR 30266*. The notice specified that the comment period on Sections 715.17(a), 717.17(a), 816.42, and 817.42 would accordingly be closed on July 26, 1982. All comments received during these comment periods on the July 2, 1981 proposal have been included in the Administrative Record and considered in this final rulemaking.

## **II. DISCUSSION OF COMMENTS AND RULES ADOPTED.**

### **A. SUMMARY OF FINAL RULE**

Existing Sections 816.42 (a)(7) and (b) and 817.42 (a)(7) and (b) relate to effluent limitation standards for surface coal mining and reclamation operations. The July 2, 1981, notice proposed to revise and consolidate these sections into new Sections 816.42(a)(3) and 817.42(a)(3). The final rule adopts this aspect of the July 2 proposal, as revised Sections 816.42(b) and 817.42(b), with minor editorial changes. Existing Sections 816.42(a) (1)-(6) and (c); 816.46; 817.42(a) (1)-(6) and (c); and 817.46 pertain to standards for sedimentation ponds and treatment facilities and will be dealt with in a separate final rulemaking.

This final rule deletes existing Sections 816.42(a)(7) and 817.42(a)(7), and includes EPA's final effluent limitations by reference in Sections 816.42(b) and 817.42(b). OSM may renumber this final rule, if necessary, to be in accordance with the numbering used in the final sedimentation pond rule. However, no additional substantive changes in these final effluent limitations will be made at that time.

When OSM proposed changes to the effluent limitation and sedimentation pond rules on July 2, 1981, amendments to both the initial and permanent programs were included. Since that time, each major coal-producing State has received approval or conditional approval of its permanent regulatory program. Thus, any new permit incorporating the standards of this rulemaking must be issued under the permanent regulatory program. For this reason, the proposal to amend the initial regulatory program has been dropped and only the permanent program is being amended.

### **B. INTERRELATIONSHIP OF EPA'S AND OSM'S RULES**

The relationship between EPA's and OSM's rules establishing effluent limitations for point source discharges from surface coal mining and reclamation operations was considered by the U.S. Court of Appeals in *In re: Surface Mining Regulation Litigation, supra*. In that case the court ruled that, where there was an overlap of regulation between the Surface Mining Control and Reclamation Act and the Clean Water Act, the provisions of the Clean Water Act must "control so as to afford consistent effluent standards nationwide." *627 F.2d at 1367*.

In its March 13, 1979, permanent program rules, OSM had specifically set out the numerical effluent limitations that were to apply to surface coal mining operations. These rules were suspended as a result of the surface mining regulation litigation to the extent that they contained standards different than the standards established by EPA. In order to minimize future confusion with respect to the applicable effluent limitations and to facilitate any future revisions in EPA's rule, this final rule does not specifically state numerical effluent limitations. Rather, it adopts the effluent limitations established by EPA by cross reference. OSM believes this approach is consistent with the Court of Appeals ruling and will help eliminate unnecessary duplication and confusion between EPA's and OSM's standards.

The final effluent limitations guidelines for existing sources and standards of performance for new sources established by EPA are fully discussed in EPA's final rulemaking, *47 FR 45382*, October 13, 1982. The reader is directed to that rule and to EPA's proposals of January 1981 and May 1981 for a complete discussion of the adopted effluent limitations.

Briefly, EPA's rules establishes best available technology (BAT) economically achievable and make the following major changes to the previous effluent limitations applicable to coal mining point sources:

1. Western mines are no longer a subcategory and will be subject to nationwide total suspended solids (TSS) limitations. (Western mines had been considered a subcategory subject to individual permit limitations on TSS).

2. The design criteria to qualify for alternate limitations for rainfall events have been deleted, and alternate effluent limitations during rainfall events have been established.
3. Discharges from areas under reclamation and discharges during rainfall events of a magnitude equal to or less than the 10-year, 24-hour event will be subject to settleable solids (SS). Discharges during rainfall events larger than the 10-year, 24-hour event will be subject only to pH limitations.
4. Postmining discharges will be regulated in accordance with nationwide effluent limitations until the time when the mine's performance bond required under the Surface Mining Control and Reclamation Act is released.
5. A zero-discharge standard is imposed for new source coal preparation plants, with an allowance made for necessary purges and blowdowns.

### **C. DISCUSSION OF COMMENTS**

The public comment period on the notice of intent to commence rulemaking, December 31, 1979, closed January 30, 1980. During that period, 59 comments were received from 21 sources. OSM held four public meetings throughout this comment period; no public hearings were held.

The public comment period on the rules proposed July 2, 1981, closed September 3, 1981. During that period, public hearings were held at 6 locations in 5 States and Washington, D.C., and 39 comments were received from 19 sources. The public comment period was reopened on May 13, 1982, for reasons explained earlier in this preamble, and closed in July 23, 1982. During that period, 33 comments from 11 sources were received.

The comments represented industry and associations, environmental groups, and Federal and State agencies. Comments received discussed both EPA's and OSM's regulations establishing standards for effluent discharges from coal mines. Comments received which addressed only EPA's regulations at 40 CFR Part 434 were forwarded to EPA. Comments concerning OSM's proposed rules are addressed below.

1. Several commenters stated that the proposed standard of a maximum of 0.5 ml/l (milliliter per liter) SS is in excess of what is considered acceptable and that the Imhoff cone test, used to establish the SS level, is without scientific merit because the American Public Health Association and others (1975, p. 96) state that "The practical lower limit is about 1 ml/l."

OSM consulted with the EPA-Environmental Monitoring and Support Laboratory, Cincinnati on the meaning of this statement and for an opinion on the proposed level. In addition, the laboratory conducted an investigation of the lower level determination of SS for EPA's Effluent Guidelines Division. This study involved sampling effluent from sedimentation ponds of 8 mines and performing a statistical evaluation on the results. As a result of this study, the method detection limit for settleable solids in the coal mining industry has been redefined in EPA's rulemaking at 0.4 ml/l. OSM, therefore, has accepted the EPA standard and believes that a limit of 0.5 ml/l is within detection limits.

Additionally, EPA conducted a self-monitoring and analytical test program in which industry submitted data on 24 sedimentation pond effluents. This self-monitoring survey showed that of those ponds sized to contain the runoff resulting from a 10-year, 24-hour storm, 98% submitted settleable solids effluent concentrations equal to or less than 0.5 ml/l during wet conditions. A large portion of the smaller ponds monitored met the 0.5 ml/l limitation as well. For more information see EPA's "Development Document for Effluent Limitation Guidelines and Standards for the Coal Mining Point Source Category," Appendixes A and B (1982), and the preamble to EPA's rules, Section VI. F.2.C.

2. Another commenter suggested that OSM should raise its SS standard from 0.5 ml/l to about 1.0 ml/l because the data do not include the effects of a 10-year, 24-hour precipitation event.

EPA and OSM adopted the 0.5 ml/l SS standard during precipitation events up to and including a 10-year, 24-hour event. This standard reflects EPA and OSM recognition of the difficulty in establishing a TSS level that is applicable nationwide, because of widely varying site-specific conditions. Thus, EPA focused on SS as the parameter for the control of solids during precipitation events. Analysis of the SS data base with consideration of limits of detection and precision,

discussed above, resulted in what EPA and OSM believe is a reasonable, justifiable method to control sedimentation during precipitation.

3. One commenter supported EPA and OSM in their effort to change the effluent limitations during precipitation events to 0.5 ml/l SS (volumetric) in lieu of 70 mg/l (milligrams per liter) TSS (mass) because it is a simpler standard to measure and is easily enforced.

OSM and EPA have accepted this comment. The rationale for the change can be found in the Environmental Protection Agency's development document (1982).

4. One commenter maintained that the Imhoff cone test should not be required as the only technique for measuring SS because it is an indirect procedure for estimating concentrations and is fairly inaccurate.

EPA on December 3, 1979, promulgated a proposed list of approved test procedures. *44 FR 69572*. EPA's test procedure 220 for settleable matter calls for use of the Imhoff cone as discussed by the American Public Health Association and others (1975, p. 95). The well-established Imhoff test is simple and easy to use, quantifies settleability of materials, and was used in the development of the data base for establishing the standard. It measures directly the solids that will settle in 1 hour of undisturbed settling. For these reasons, OSM does not believe use of this particular method imposes undue burden, but rather will assist in the implementation of a uniform standard.

5. Two commenters advocated a 5-year, 24-hour design precipitation event because they felt the increased sedimentation pond size is not justified in terms of probability of occurrence during the typical life of a mining operation and marginal water-quality benefits to be obtained from the larger design. Other commenters believed that either the design criteria or numerical effluent limitations, but not both, should be specified. The commenters pointed out that ponds large enough to accommodate a 10-year, 24-hour storm were not feasible in many areas, especially steep slope areas, that such ponds posed safety hazards in some cases, and that some States (especially Western States) discourage large ponds because of water rights considerations.

These comments were accepted, and based upon these considerations, EPA's final regulations contain numerical limitations but no pond design criteria. Standards for construction of sedimentation ponds are established by other aspects of OSM's rules and will be addressed in OSM's final sedimentation pond rule.

6. Two commenters suggested that an exemption for precipitation events be given for iron, manganese, and pH. Another commenter recommended that the pH limitation of 6 to 9 be removed for precipitation events greater than the 10-year, 24-hour event since the required sedimentation ponds already represent the best technology achievable.

EPA has granted an exemption for iron and manganese during a precipitation event; however, the pH requirement has been retained. The Environmental Protection Agency (1982, pp 9-10) states that the pH can be effectively controlled during all precipitation events regardless of their size. The pH requirement has not been removed because the results of the self-monitoring study show that pH levels of from 6 to 9 can be maintained and achieved at all times. OSM agrees with EPA and accepts these comments in part. Additionally, as indicated above, EPA's final rule relies upon numerical limitations rather than pond design criteria. Thus, the commenters' suggestion to eliminate the numerical pH standard in lieu of sedimentation pond criteria is rejected.

7. Two commenters stated that requiring an average TSS effluent limitation of 70 mg/l during precipitation events is inconsistent with EPA's rules. (I-14a and late comment 2f.) EPA recognized that relief is needed from TSS during precipitation events (e.g., rainfall exemptions), and OSM agrees with these comments. EPA's final rules give effluent limitations for base-flow conditions, for precipitation events up to a 10-year, 24-hour event, and for precipitation events above the 10-year, 24-hour event. Therefore, OSM and EPA agree that the TSS base-flow limitation of 70 mg/l may not be achievable during precipitation events.

8. In the opinion of two commenters, a TSS standard based on the receiving-stream water quality at the time of discharge should be adopted because during precipitation events the amount of TSS that streams carry is higher than the effluent limitations allow to be discharged from the permit area. This causes an imbalance that must be made up somewhere downstream. Therefore, it is the commenters' contention that not taking into consideration the background concentrations actually causes pollution downstream. Two other commenters suggested that the TSS effluent limitation

may be incompatible with the natural sediment-carrying capacity of the base flow of the receiving stream and cause additional erosion downstream. They therefore suggest that the base condition of the receiving stream should be considered in setting the effluent limitation.

Under the Clean Water Act, as amended, EPA has promulgated effluent limitations based on what technology can achieve, not on what the stream can assimilate or on the base-flow condition of a stream. The effluent limitations promulgated by EPA apply nationwide. Under EPA's final rule, no TSS limit is imposed during precipitation events and the available data base indicates that the settleable solids limit for rainfall events up to the 10-year, 24-hour storm are reasonably achievable. Therefore, OSM believes that no special provision is currently necessary to accommodate those situations where natural stream characteristics result in TSS levels higher during precipitation events than the base-flow TSS effluent limitations. Additionally, OSM believes that there is not sufficient data available, which indicates that the standards will result in adverse impacts on the receiving stream, to justify a change in the nationwide standard. If at a particular mine site, fundamentally different factors exist from those considered in the development of the EPA numerical effluent limitations, EPA's rules provide the flexibility to allow the consideration of a different standard on a site-specific basis.

9. One commenter stated that the effect of surface mining is potentially devastating to the hydrologic balance of mined areas.

Congress, in writing Section 515(b)(10)(B)(i) of the Act, recognized that surface mining may have an adverse impact on the hydrologic balance and required that additional contributions of suspended solids to receiving streams must be prevented to the extent possible using the best technology currently available. The Act provides a variety of means to ensure that such potential impacts are considered. OSM believes that the effluent limitations, promulgated by EPA under 40 CFR Part 434, are consistent with this mandate of Congress.

10. Several commenters recommended that OSM adopt EPA's rainfall exemption.

OSM has adopted the same standards as those included in EPA's rule. This includes any variances or exemptions that may be provided under EPA's rule.

11. One commenter felt that adoption of the rainfall standards from EPA's proposed rules would seriously weaken the existing standards because they would not adequately control the release of smaller particles. The commenter felt the rainfall exemption could result in stream degradation, especially where discharges are located upstream a from water-supply intake or a sensitive stream (e.g., a trout stream). Another commenter recommended retention of a TSS effluent limitation for mines located on sensitive streams. Two commenters contended that turbid discharges need to be controlled because of the potential for detrimentally affecting public water supplies and sensitive aquatic species.

The effluent limitations developed by EPA are technology-based effluent limitations which are uniform on a nationwide basis. They provide standards that must be met independent of the water quality of the receiving stream. Therefore, the commenters' recommendations that a more stringent nationwide effluent limitation be established for sensitive streams is misplaced. Additionally, under the rules promulgated on March 13, 1979, as amended on December 31, 1979, an exemption for precipitation events greater than the 10-year, 24-hour event had to be granted because studies showed that sedimentation ponds designed, constructed, and maintained according to the best available technology were not able to achieve the TSS limitations during precipitation events (D'Appolonia, 1979, and Skelly and Loy, 1979). The new effluent limitations represent the level that can be achieved using the best available technology economically achievable, thereby meeting the mandate of Congress under both the Clean Water Act and the Surface Mining Control and Reclamation Act. This does not, however, preclude permit writers from establishing a TSS limitation on a case-by-case basis (based on water quality criteria, etc.) where appropriate under Section 402 of the Clean Water Act.

12. Some commenters advocated establishing effluent limitations according to the assimilative capacity of the receiving stream (waste-load allocations) because basing standards on technology rather than the assimilative capacity of receiving streams is compelling treatment that might not be needed.

This comment is rejected because the Clean Water Act, as amended, requires that effluent limitations be based on technology and not on the assimilative capacity of the receiving stream.

13. One commenter suggested that the proposed effluent limitations which do not limit the discharge of heavy metals from revegetated areas during precipitation events, allow pollution to go uncontrolled.

EPA (1982) showed that toxic metal concentrations from untreated mine wastewater were at or below the detection limit, and also that iron and manganese concentrations are below best practicable control technology currently available (BPT) and also below BAT limitations during precipitation events, and therefore there is no need to establish specific effluent limitations applicable to them during such events.

14. One commenter stated that regardless of the decision of the U.S. Court of Appeals of the District of Columbia in *In re: Surface Mining Regulation Litigation*, 627 F 2d 1346, 1366-1369 (D.C. Cir. 1980), that OSM's rules on effluent limitations cannot be more stringent than those promulgated by EPA, OSM still is required to analyze all alternatives and to deal with the problem of sediment being added to sensitive streams.

EPA has promulgated effluent limitations that are applicable nationwide in accordance with the requirements of the Clean Water Act. However, regulatory authorities have the capability, under EPA's law, of requiring more stringent standards if the receiving stream so warrants. Some streams are more sensitive than others and may require a different degree of protection. The State regulatory authorities, knowing the site-specific conditions, are in the best position to set more stringent standards if necessary, based on the condition of the receiving stream.

15. Two commenters said that OSM has no authority to modify effluent limitations independently of EPA because of the U.S. Courts of Appeals decision of May 2, 1980.

OSM and EPA have worked closely in developing the point-source effluent limitations for coal mining. The rules promulgated today are the product of that joint effort. This final rule merely adopts EPA's final rules by cross reference. Therefore, OSM is not promulgating any rules that are either more stringent or less stringent than EPA's.

16. One commenter said that the Surface Mining Control and Reclamation Act does not give OSM the authority to prescribe effluent limitations for point sources, and therefore this portion of the rules should be withdrawn.

Section 515(b)(10)(b)(i) of the Act requires the use of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to the receiving stream. In order to achieve this goal for point source discharges, OSM has promulgated rules specifying that the discharge from a disturbed area must meet the effluent limitations promulgated under 40 CFR Part 434. By requiring compliance with 40 CFR Part 434, OSM is not imposing effluent limitations different than those imposed by EPA. OSM believes this approach is consistent with the mandate of the Surface Mining Act.

17. Three commenters contended that OSM was arbitrary when it adopted EPA's effluent limitations under Sections 816.42 and 817.42, because the effluent limitations were developed for preparation plants and associated areas and for pump or gravity discharge from underground mines and not for runoff from surface mines.

OSM rejects this comment. EPA's standards were developed for runoff from surface mines as well as discharges from preparation plants and underground mines. This matter has been fully discussed in the past (*42 FR 62649 and 62650*, December 13, 1977). Furthermore, Section 515(b)(10)(b)(i) of the Act states in reference to sediment in discharges from surface coal mining operations, that "in no event shall contributions be in excess of requirements set by applicable State or Federal law". By adopting EPA's rules under 40 CFR Part 434, OSM is complying with this mandate.

18. One commenter suggested that the following section be added as Section 816.42(a)(4):

"Non-point discharges from areas disturbed by mining activity shall not cause a violation of water quality standards and will not degrade the quality of the receiving streams by an increment in excess of the EPA effluent limits which would be applicable to the mine runoff if it were a point source, as determined by appropriate upstream and downstream sampling allowing for dilution. This requirement shall apply through final bond release."

The comment is rejected to the extent that it would apply EPA's effluent limits to non-point sources. EPA's standards were developed specifically for point source discharges. The Clean Water Act does not authorize EPA to promulgate

effluent limitations applicable to non-point source discharges. OSM's rules do prescribe a range of practices that will ensure that adverse impacts from non-point source discharges are minimized. Non-point source discharges therefore should not cause a violation of the water quality standards for the receiving stream.

Proposed Section 816.42(a)(3) specifically required that State water quality standards be complied with. The rules being promulgated today use the more general language of previous Section 816.42 (a)(7) that discharges must comply with all State and Federal water quality laws and regulations. This includes applicable water quality standards.

19. Three commenters maintained that the zero-discharge performance standard for new-source preparation plants should be removed because it has not been adequately demonstrated as mandated by Section 306 of the Clean Water Act. The commenter maintained that the EPA study (1982) fails to take into consideration discharges due to malfunctioning and maintenance.

EPA has promulgated a zero-discharge rule for new source preparation plants. Although zero discharge is a demonstrated technology, OSM and EPA agree that total recycle may not always be achievable for all plants. Thus, occasional purges and blowdowns are allowed if they are shown to be necessary to reduce the concentration of solids or process chemicals in the water circuit to a level which will not interfere with the preparation process or the process equipment. This is a specified discharge in that a notice of the purge must be submitted to the agency for responsibility for administering the National Pollution Discharge Elimination System (NPDES), before such occurrence. If a discharge other than this occasional purge occurs, the upset and bypass provisions, as described in EPA's rules, may be available.

20. Another commenter recommended that the effluent limitations be based on dissolved iron and manganese levels rather than total iron and manganese levels.

The decision to regulate certain metals on a total rather than dissolved basis was made during EPA's best practicable technology (BPT) development process. The use of total metals was deemed appropriate because the treatment technology which supports the limitations removes both dissolved and suspended metals, the sum of which is total metals. The total-metals basis was used because it reflects the level of reduction possible using the best practical technology and was adequately supported by EPA's development studies. Furthermore, several commenters during the BPT development process argued for limitations on a total-metals basis. The rationale for selection of total metals for best available technology (BAT), best conventional technology (BCT), and new-source performance standards (NSPS) is identical to that for BPT.

21. One commenter stated that the distinction between EPA's effluent limitations and water quality criteria should be emphasized. OSM has consulted with EPA and the following is an explanation of the two terms.

a. Effluent limitations are those parameters that must be obtained at the end of a discharge, before mixing with the waters of the receiving stream, lake, or ocean. The term "effluent limitation" is defined in 40 CFR 401.11(i) as "any restriction established by the Administrator on quantities, rates, and concentrations of chemical, physical, biological and other constituents which are discharged from point sources, other than new sources, into navigable waters, the waters of the contiguous zone or the ocean."

The term "point source" in the above definition is further defined at 40 CFR 401.11(d) as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged."

b. Water quality standards apply only to the waters of a stream, lake, or ocean. They specify the allowable average concentrations of pollutants in a body of water. They are instream standards that cannot be exceeded. All the States have water quality standards. The term "water quality standards" is defined in 40 CFR 121.1(g) as "standards established pursuant to section 10(c) of the Act, and State-adopted water quality standards for navigable waters which are not interstate waters."

22. Three commenters stated that no design criteria can be developed to meet EPA's or OSM's effluent limitations. Therefore, best management practices (BMP) should be enforced by the OSM at the permitting stage, whenever possible.



OSM and EPA do not agree with the commenter that the effluent limitations developed cannot be achieved. Analytical results studied by the Environmental Protection Agency (1982) support the standards included in EPA's regulations. For more information on the test procedures and conclusions, refer to Environmental Protection Agency (1982).

23. Three commenters asserted that the performance-standards approach, which states that TSS limits must be met for base flow, and SS limits be met during precipitation events should be clarified.

OSM and EPA believe that the established standards are sufficiently clear. The TSS and pH limits apply during base flow; the SS and pH limits apply during precipitation events up to and including the 10-year, 24-hour event; and pH limit applies to precipitation events above a 10-year, 24-hour event.

24. Several commenters stated that operators should not be required to monitor the effluent if they build and maintain a sedimentation pond designed for a 10-year, 24-hour precipitation event because EPA had found that such structures will meet the required standards.

Under the Clean Water Act, EPA is required to establish effluent limitations for certain industrial categories. EPA considered comments suggesting that it establish either design criteria or numerical effluent limitations. Based on its review of the relationship between the design criteria and the effluent limitations, EPA has decided to delete pond design criteria from its rule and rely on the numerical effluent limitations.

25. Two commenters suggested that the SS standards be set by each State. A minimum particle size of 5 microns for any discharge was also suggested.

OSM has rejected this comment because EPA, under the Clean Water Act, as amended, is mandated to set minimum nationwide standards for point-source discharges from certain industrial categories. The development of this standard cannot be delegated to the States. The commenters' suggestion that OSM impose a 5-micron particle size as a minimum standard for discharges is also rejected. OSM believes that the effluent limitations developed by EPA are reasonable and are in accordance with the requirements of the Clean Water Act and the Surface Mining Control and Reclamation Act.

26. One commenter maintained that OSM should not apply EPA's effluent limitations for drainage from underground coal mining support facilities which do not commingle with discharges from mine workings.

The comment is rejected. The effluent limitations established today apply to all coal mining point sources, including those associated with underground mining operations.

27. Several commenters suggested that OSM await the promulgation of EPA's final rules on effluent limitations for coal mining point sources (40 CFR Part 434) before promulgating its own final rules ( Sections 816.42 and 817.42).

OSM has accepted this comment and has worked very closely with EPA in the development of their final rules.

28. One commenter believed that the concept of sediment being a pollutant should be changed because naturally occurring sediment should be qualified and accounted for in the imposition of effluent limitations.

The question as to whether sediment is a pollutant has been studied by EPA. OSM adopted EPA's conclusion that sediment is a pollutant. See also, del Rio (1981). Additionally, the amount and constituents of the sediment picked up in runoff from mining operations may be above and different from natural conditions.

29. Two commenters felt that the performance standards should be based on volume of pollutants rather than concentration.

OSM disagrees. Discharges from mining activities are not constant, but rather vary significantly depending upon the weather. Therefore, specific loading cannot be predicted. As a result, a volume standard cannot be reasonably developed as a nationwide standard.

### III. PROCEDURAL MATTERS

#### Approval of Other Agencies

OSM has obtained all necessary comments and concurrences from other agencies. Sections 501(a)(B) and (b) of the Act require the written concurrence of the Administrator of the Environmental Protection Agency in regulations relating to air or water quality standards promulgated under the Clean Air Act and the Clean Water Act. The Administrator of the Environmental Protection Agency has concurred in the issuance of this regulation. Section 516(a) of the Act requires the written concurrence of the head of the department that administers the Federal Coal Mine Health and Safety Act of 1969 -- the Assistant Secretary for Mine Safety and Health, U.S. Department of Labor -- in OSM regulations concerning the surface effects of underground mining. The Assistant Secretary for Mine Safety and Health has concurred in the issuance of this regulation.

#### Federal Paperwork Reduction Act

The Department of the Interior (DOI) has determined that this final rule does not require the collection of information as defined under *44 U.S.C. 3501* et seq.

#### National Environmental Policy Act

OSM published in January 1979 a Final Environmental Statement (OSM-EIS-1) on the permanent program rules. This document discusses in detail the beneficial and the adverse effects of the rules. One of the subjects addressed in OSM-EIS-1 is water quality and sedimentation control.

EPA has prepared an Environmental Assessment Final Report (1980b) for the proposed effluent limitations of January 13, 1981 (*46 FR 3136*), as amended on May 29, 1981 (*46 FR 28873*). This document can be examined at EPA's Public Information Reference Unit, Room 2004 (rear EPA Library), 401 M Street, SW., Washington, D.C.

OSM has prepared an environmental assessment (EA) which analyzed the cumulative impacts of adopting this rule in relation to certain other proposed rules being considered by OSM. On the basis of this EA and the EA prepared by EPA, it was determined that adopting these rules will not constitute a major Federal action significantly affecting the quality of the human environment.

Accordingly, OSM has issued a Finding of No Significant Impact (FONSI) for this rule. OSM's EA and FONSI are on file in the Administrative Record located at 1100 L Street, NW., Room 5315, Washington, D.C.

#### Executive Order 12291

The DOI has determined that this document is not a major rule and does not require a regulatory impact analysis under Executive Order 12291.

EPA has prepared an economic analysis for the effluent limitations as promulgated (1982). The analysis summarizes the impact of EPA's effluent limitations, 40 CFR Part 434, on the coal mining industry.

EPA's regulatory analysis is available for inspection in OSM's Administrative Record, 1100 L Street, NW., Room 5315, Washington, D.C.

#### Regulatory Flexibility Act

The DOI certifies, pursuant to the Regulatory Flexibility Act, *5 U.S.C. 601* et seq., that these rules will not have a significant economic impact on a substantial number of small entities and therefore do not require a regulatory flexibility analysis under Pub. L. 96-354.

## Administrative Record

Copies of materials in the administrative record (except comments submitted to EPA) are available at OSM's Administrative Record, Room 5315, 1100 L Street, NW., Washington, DC. Comments submitted to EPA are available at EPA's Public Information Reference Unit, Room 2004 (rear EPA Library), at 401 M Street, SW., Washington, D.C.

### **IV. REFERENCES CITED**

American Public Health Association, American Water Works Association, Water Pollution Control Federation, 1975, Standard methods for examination of water and wastewater: 14th edition, New York, N.Y., 1193 pp.

Barfield B. J., Warner, R. C., and Haan, C. T., 1981, Applied hydrology and sedimentology for disturbed areas: Oklahoma Technical Press, Stillwater, Okla., 603 pp.

D'Appolonia, 1979, Evaluation of sedimentation pond design relative to capacity and effluent discharge: Letter Report, Task 8, Project 78-334-D, Pittsburgh, Pa., 21 pp.

del Rio, J. R., 1981, Is sediment a pollutant?: Symposium of Hydrology, Sedimentology and Reclamation on Surface Mining, University of Kentucky, December 7-11, 1981, Lexington, Ky., p. 435-438.

Skelly and Loy, 1979, Evaluation of performance capacity of surface mine sediment basins: Harrisburg, Pa., 67 pp.  
U.S. Environmental Protection Agency, 1980, Environmental assessment for the coal mining industry: Draft Final Report, Washington, DC, 26 pp. plus appendixes 5-A through 5-E.

U.S. Environmental Protection Agency, 1982, Economic impact analysis of proposed effluent limitations guidelines: EPA-440/2-80-085, Volumes I-III, Washington, DC, various pages.

U.S. Environmental Protection Agency, 1982, Development document for effluent limitation guidelines and standards for the coal mining point source category: EPA 440/1-81/057b, Washington, D.C., 429 pp.

### **LIST OF SUBJECTS**

#### 30 CFR Part 816

Coal mining, Environmental protection, Reporting requirements, Surface mining.

#### 30 CFR Part 817

Coal mining, Environmental protection, Reporting requirements, Underground mining.

For the reasons set forth in the preamble, Parts 816 and 817 of Chapter VII, Title 30, of the Code of Federal Regulations are amended as set forth herein.

Dated: October 8, 1982.

Daniel N. Miller, Jr., Assistant Secretary, Energy and Minerals.

### **PART 816 -- PERMANENT PROGRAM PERFORMANCE STANDARDS -- SURFACE MINING ACTIVITIES**

#### **SECTION 816.42 [AMENDED]**

1. Paragraph 816.42(a)(7) is removed.

2. Paragraph (b) of Section 816.42 is revised to read as follows:

**SECTION 816.42 - HYDROLOGIC BALANCE: WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS.**

\* \* \* \* \*

(b) Discharges of water from areas disturbed by surface mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR Part 434.

\* \* \* \* \*

**PART 817 -- PERMANENT PROGRAM PERFORMANCE STANDARDS -- UNDERGROUND MINING ACTIVITIES**

Section 817.42 [Amended]

3. Paragraph 817.42(a)(7) is removed.

4. Paragraph (b) of Section 817.42 is revised to read as follows:

**SECTION 817.42 - HYDROLOGIC BALANCE: WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS.**

\* \* \* \* \*

(b) Discharges of water from areas disturbed by underground mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR Part 434.

\* \* \* \* \*

(Pub. L. 95-87, 30 U.S.C. 1201 et seq. )

[FR Doc. 82-29123 Filed 10-21-82; 8:45 am]  
BILLING CODE 4310-05-M