

FEDERAL REGISTER: 44 FR 77447 (December 31, 1979)

DEPARTMENT OF THE INTERIOR

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

30 CFR Parts 715, 717, 816 and 817

Interim and Permanent Regulatory Program

ACTION: Notice of suspension and withdrawal of certain rules in 30 CFR Chapter VII, Subchapters B and K; and statement of policy regarding effect on State programs and enforcement during initial and permanent program.

SUMMARY: This notice suspends the current OSM rainfall exemption regulations from numerical effluent suspended solids limits and also suspends or withdraws portions of the sedimentation pond design criteria in both the initial and permanent surface coal mining and reclamation operations regulatory programs. This suspension will remain in effect pending further rulemaking to consider modification of the affected rules. In the interim, all surface coal mining and reclamation operations will still be subject to the applicable effluent limits and requirements to control all drainage through one or more properly designed sedimentation ponds. However, OSM will authorize the award of exemptions from the total suspended solids effluent limits by using the appropriate elements of USEPA's revised precipitation event exemption regulations, 40 CFR 434.22(c), 434.25(c), 434.32(b), 434.35(b), 434.42(b), 434.45(b), as amended.

EFFECTIVE DATE: December 31, 1979.

FOR FURTHER INFORMATION CONTACT: Jose R. Del Rio, Civil Engineer, Division of Technical Services, Office of Surface Mining, U.S. Department of the Interior, South Building, 1951 Constitution Avenue, N.W., Washington, D.C. 20240; (202) 343-4022.

SUPPLEMENTAL INFORMATION:

On March 13, 1979, OSM issued permanent program regulations which included sediment control performance standards in Subchapter K (30 CFR 816.42, 816.46 and 817.42, 817.46). Limitations on the total suspended solids (TSS) content of effluent discharged by surface coal mining and reclamation operations from disturbed areas are given at 30 CFR 816.42(a)(7) and 817.42(a)(7). The limitations of 70 mg/l maximum allowable and 35 mg/l average of daily values for 30 consecutive discharge days were essentially the same as those established by EPA under the Clean Water Act, 33 U.S.C. 1251, *et seq.*, for the coal mining point-source category, 40 CFR 434.22, 434.25, 434.32, 434.35, 434.42 and 434.45. To attain the TSS effluent standards, the OSM regulations required that operators utilize all necessary sediment control measures (e.g., 30 CFR 816.41, 816.45), including passing all runoff through sedimentation ponds. See, e.g. 30 CFR 816.42(a)(1) and 817.42(a)(1). The rules also set forth design criteria for these ponds governing, *inter alia*, (1) minimum sediment storage volume, 30 CFR 816.46(b) and 817.46(b); (2) minimum runoff detention time, 30 CFR 816.46(c) and 817.46(c); (3) minimum discharge rate for dewatering devices, 30 CFR 816.46(d) and 817.46(d); and (4) minimum sediment removal frequency, 30 CFR 816.46(h) and 817.46(h). The regulations also contained an exemption from the TSS effluent limits during certain precipitation events:

SECTIONS 816.42 AND 817.42 -- (b) A discharge from the disturbed areas is not subject to the effluent limitations of this Section, if --

(1) The discharge is demonstrated by the discharge to have resulted from a precipitation event equal to or larger than a 10-year 24-hour precipitation event; and

(2) The discharge is from facilities designed, constructed, and maintained in accordance with the requirements of this Part.

An operator was eligible for this exemption only if his or her pond met OSM criteria *and* the discharge from the pond was caused by an actual 10-year 24-hour precipitation event. The same requirements for the surface effects of underground mining are found in Sections 817.42 and 817.46. To test the utility of OSM's pond design criteria for meeting TSS effluent limits, OSM and EPA commissioned two studies which were completed this summer: Skelly and Loy "Evaluation of Performance Capability of Surface Mine Sediment Basins" and D'Appolonia's "Evaluation of Sedimentation Pond Design Relative to Capacity and Effluent Discharge." Notice of the availability of these documents was published by EPA in the Federal Register on August 4, 1979. 44 FR 47595.

On September 21, 1979, the Joint National Coal Association/American Mining Congress Committee on Surface Mining Regulations (NCA/AMC) petitioned OSM to immediately suspend the TSS effluent limits and sedimentation pond design

criteria, and to reconsider those regulations in light of the studies. On October 18, 1979, OSM published notice of receipt of the petition and solicited comments on whether it should be granted. 44 FR 00226.

As a result of information in the record as a whole, including the data contained in the recent studies and the comments on NCA/AMC's petition, OSM has decided, first, to grant the petition in part by suspending today certain rules of its permanent program rules, pending further modification through rulemaking. As a related matter, OSM is also today suspending or withdrawing the corresponding rules of the initial regulatory program, 30 CFR 715.17 and 717.17.

SUMMARY AND BASIS FOR SUSPENSION

A. INTERRELATIONSHIP OF EPA AND OSM RULES . In developing regulations for effluents from coal mining operations, OSM has always been aware that there were certain circumstances under which it was unlikely, if not impossible, for operators to comply with the TSS effluent limits. Under both the initial program (30 CFR 715.17(a)(1) and 717.17(a)(1)) and the permanent program (30 CFR 816.42(b) and 817.42(b)), an operator has been excused from meeting effluent limits for discharges from the disturbed area resulting from a 10-year 24-year precipitation event. However, the Skelly and Loy study indicated that even using OSM design criteria, ponds could not meet the TSS effluent limits during the precipitation events which were modeled. OSM has previously noted (44 FR 60226):

That the matters covered in the (NCA/AMC) petition are related to the U.S. Environmental Protection Agency (EPA) regulations (40 CFR 434) covering the coal industry under the National Pollutant Discharge Elimination System (NPDES) of the Clean Water Act, 33 U.S.C. 1251 *et seq.* On April 26, 1977, EPA promulgated final regulations establishing effluent limitation guidelines based on best practicable control technology currently available (BPT) for existing sources in the coal mining point source category 42 FR 21380. On January 12, 1979, EPA promulgated standards of performance for new sources (NSPS) within the coal mining category based on the best available demonstrated control technology. 44 FR 2586. Both sets of EPA regulations on numerical effluent limitations for discharges of total suspended solids are similar to those promulgated by OSM at 30 CFR. 816.42(a)(7) and 817.42(a)(7).

After having previously revised its catastrophic rainfall exemption for the BPT regulations to conform to the corresponding provision in its NSPS regulations, EPA revised the exemption provision for both the BPT and NSPS rules on July 6, 1979. 44 FR 39391-39392. At that time EPA solicited public comment on what type of final revised rainfall exemption should be adopted at 40 CFR 434. Following the publication of the Skelly and Loy and D'Appolonia reports described above, EPA supplemented its request for comments to include consideration of those reports. 44 FR 47595 (August 14, 1979). On September 25, 1979, EPA extended this public comment period from a deadline of October 3, 1979, to October 19, 1979. 44 FR 55223.

Comments received by OSM on the NCA/AMC petition and by EPA on its proceedings were reviewed by a joint agency working group in order to coordinate agency action on this common issue.

EPA has advised OSM that its final rule on the rainfall exemption applicable to the coal industry will be published in the Federal Register in the immediate future. The original EPA exemption is found in 40 CFR Part 434, 434.22(c), 434.25(c), 434.32(b), 434.35(b), 434.42(b), 434.45(b), and will be revised to read as follows:

Any overflow, increase in volume of a discharge or discharge from a by-pass system caused by precipitation or snowmelt shall not be subject to the limitations set forth in paragraph (a) of this section. This exemption shall be available only if the facility is designed, constructed and maintained to contain or treat the volume of water which would fall on the areas covered by this subpart during a 10-year 24-hour or larger precipitation event (or snowmelt of equivalent volume). The operator shall have the burden of demonstrating to the appropriate authority that the prerequisites to an exemption set forth in this subsection have been met.

In the preamble to the final rule, EPA will also indicate that it is continuing to gather information on the entire TSS issue and anticipates proposing further amendments to its effluent limitation regulations in the spring of 1980. OSM will continue to coordinate its rulemaking actions closely with EPA on this issue and intends to propose amendments to its own rules at or about the same time as EPA.

B. THE TOTAL SUSPENDED SOLIDS EFFLUENT LIMITATIONS . The primary reason for the suspension of the existing OSM rainfall exemptions is recognition of the fact that the record does not contain substantial data correlating total suspended solids effluent quality with particular rainfall levels. Therefore, OSM is unable to fairly determine what suspended solids concentrations result on the national scale from the use of conventional physical sediment removal technologies during major precipitation events when a sediment pond's required containment capacity (i.e., run off from a 10-year 24 hour storm) is exceeded. Moreover, the record does not disclose what TSS concentration will occur during these types of storm events, if chemical treatment is used in lieu of, or in addition to physical sediment removal.

The effectiveness of both physical and chemical treatment in this regard will be better known in the near future when the results of EPA's current data-collection efforts are known. At that time, the data deficiencies discussed above should be cured. Then, specific rainfall-level TSS effluent limits can be established, premised on best available physical and/or chemical sediment removal technologies.

Finally, OSM notes that substantial criticism of the model utilized in the Skelly and Loy studies was raised by commenters, some of whom claimed that it under predicted suspended solids discharges and others arguing that it was too conservative. OSM agrees that the model probably did not perfectly predict actual mine performances, particularly since the study did not include detailed validation sampling of sediment size distributions and effluent values during high-intensity rainfalls. However, the model does show that, in the absence of such sampling, it is questionable that the 35/70 mg/1 values can be used during substantial rainfalls. Moreover, the model results did not in any way disprove the conclusion reached long ago that the numerical effluent limits can be achieved during base flows.

As OSM understands NCA/AMC's petition, its primary objection to 30 CFR 816.42(a)(7) and 817.42(a)(7) was that the effluent limitations established therein for TSS solids could not be achieved during substantial precipitation events by the use of conventional physical sediment removal technologies. NCA/AMC contended that, primarily because of the conclusion of the Skelly and Loy report, those effluent limitations could not be achieved during substantial precipitation events with the use of sediment control measures required by 30 CFR 816.46 and 817.46. OSM received a range of comments on this aspect of the NCA/AMC's petition.

Some commenters said that the TSS limits could not be met at any time. OSM disagrees. During "base flows," that is when flows from the disturbed area are not the direct result of a substantial precipitation event, the weight of the available data shows that the TSS effluent limits can be achieved. See preamble to 30 CFR 816.42 at 44 FR 15151-15156. Moreover, the Skelly and Loy report itself showed that these limits could be met during base flows, a matter also confirmed by the original EPA "Development Document", supporting EPA's effluent limit regulations. As related matter, OSM has rejected comments which objected to the establishment of generic TSS effluent limitations, rather than on a case-by-case basis according to the water quality of particular receiving streams. The effluent limitations are the expression of measuring the use of "best available control technology" under Sections 515(b)(10)(B) and (b)(24) of the Surface Mining and Control Act (SMCRA) and similar technology requirements under the Clean Water Act. Uniform effluent limits are needed to ensure a national minimum level of uniformity in furtherance of congressional policy. See Sections 101(g) and 102(g) of SMCRA.

Other commenters supported NCA/AMC's petition on the basis of the Skelly and Loy Report's conclusions that the TSS effluent limitation could not be met during substantial rainfalls. After careful analysis of all the relevant data, OSM has decided that this material tends to establish that these effluent limitations may not be achievable with the use of conventional physical sediment removal measures only when flows are in direct response to a substantial rainfall on snowmelt. As a result, OSM has decided to suspend its existing precipitation event exemption. at 30 CFR 816.42(b) and 817.42(b).

In place of those rules, OSM instead will authorize the granting of exemptions for sediment discharges from the disturbances according to the elements of the corresponding exemption allowable under EPA's rules, 40 CFR 434.22(c), 434.32(b), and 434.42(b). We note that EPA intends to issue a final amended rainfall exemption rule in the near future. OSM will, of course, utilize the elements of the revised EPA rule until a change to the OSM rules can be made by further rulemaking. We note that the corresponding rainfall exemption under our initial program rules (30 CFR 715.17(a)(1) and 717.17(a)(1)) will be similarly suspended and the relevant elements of EPA's revised rainfall exemption used in lieu thereof.

However, the application of the rainfall exemption by OSM will differ from that of EPA. The OSM TSS effluent limitations apply to all "disturbed areas" as that term is defined in 30 CFR 701.5 and 816.42, and apply throughout the reclamation phase of mining as that term is defined in 30 CFR 701.5, whereas the EPA TSS effluent limitations apply only to the active mining area or to mixed discharges from the active and reclamation areas. Therefore, OSM will allow for rainfall exemption to all "disturbed areas" throughout the life of a surface coal mining and reclamation operation (i.e., until bond release) by use of the elements of EPA's revised exemption.

C. SEDIMENTATION POND DESIGN CRITERIA . The NCA/AMC petition also requested immediate suspension and reconsideration of OSM sedimentation pond design criteria in light of information contained in the Skelly and Loy study. OSM design criteria for ponds in Section 816.46 and 817.46 require, among other factors (1) minimum sediment storage capacity, (2) minimum detention time, (3) minimum standards for dewatering devices, (4) prohibitions on short-circuit, (5) minimum emergency spillway requirements, (6) minimum sediment removal frequency, and (7) various pond embankment design standards. These design criteria for ponds were formulated on the expectation that they would result in operators meeting the TSS effluent limitations of Sections 816.42(a)(7) and 817.42(a)(7).

Commenters supporting the petition urged OSM to suspend its design criteria. It was argued that the record showed that OSM designed ponds could not meet effluent limitations during substantial precipitation events; that OSM ponds could not remove fine sediment particles during precipitation events even with maximum detention time; and that OSM ponds were

too large and too costly. Because of the data contained in the studies and the comments, OSM has decided to suspend certain of its specific design criteria pending further rulemaking. The methods for determining minimum sediment storage volume and detention time will be suspended, but the general requirements that ponds provide a minimum sediment storage volume (Sections 816.46(b) and 817.46(b)) and that ponds hold the volume of water resulting from a 10-year 24-hour precipitation event (Sections 816.46(c) and 817.46(c)), will be retained. OSM believes that the portions of Sections 816.46(b) -- (e) and 817.46(b) -- (e) which are not being suspended are, in any event, equivalent to the technology required under the revised EPA rainfall exemptions.

In addition, OSM will suspend dewatering device requirements and sediment removal requirements which are tied to the specific sediment storage volume and theoretical detention time. General requirements that ponds have a dewatering device (Sections 816.46(d) and 817.46(d)) and that sediment be removed from ponds (Sections 816.46(h) and 817.46(h)) will be retained.

Some commenters objected that the use of a 10-year 24-hour event as the inflow standard around which pond performance is built was arbitrary. The use of the 10-year 24-hour event is required in order that OSM's rule be consistent with EPA's requirements. See 40 CFR 434.22(b), as amended. Additional discussion of this issue is found in 42 FR 46932 and 44 FR 15164.

In summary, OSM has decided to suspend certain specific design criteria relating to sediment storage capacity and detention time, and to initiate rulemaking on these questions. However, ponds still must be sufficient to handle a 10-year 24-hour event, and they are still subject to all other design criteria. Moreover, they must be safe and, therefore, will be required to meet the non-suspended portions of Sections 816.46 and 817.46.

OSM notes that the same commenters renewed objections made in prior rulemakings that no design criteria should exist for sediment pond. OSM did not accept those suggestions. National design criteria are necessary to implement Sections 515(b)(11)(B) and 515(b)(24) of the Act, to ensure a minimum level of national uniformity in the control of sediment. See Sections 101(g) and 102(a)-(d) of SMCRA.

Finally, we note that the reasons for suspension of certain portions of 30 CFR 816.45 and 817.46 justify corresponding changes to the equivalent requirements of the initial program rules, 30 CFR 715.17(e) and 717.17(e). The initial rules were revised and published on May 25, 1979, 44 FR 30610-30634, but have not yet been made effective as a result of the order of Judge Flannery on May 3, 1978. See, *In Re: Surface Mining Regulation Litigation*, 452 F.Supp. 321 (D.D.C. 1978). Therefore, OSM will withdraw the relevant provisions of Sections 715.17(e) and 717.17(e). All other portions of Sections 715.17(e) and 717.17(e) will continue to stand for approval.

Statement of Policy Regarding Enforcement by OSM and Effects on State Programs

ENFORCEMENT

In the interim program OSM will continue to enforce the requirement that (1) all water from the disturbed area pass through as sediment pond or ponds, (2) all discharges from such ponds meet the effluent limitations, and (3) all other hydrologic protection requirements of 30 CFR 715.17 and 717.17, other than subsection (e), be complied with.

After the suspension, in the interim program OSM will enforce the effluent limitations including those for total suspended solids (TSS) contained in 30 CFR 715.17(a) and 717.17(a). For the purpose of granting rainfall exemptions in TSS discharges, OSM will utilize the applicable elements of EPA's revised rainfall exemption which is set forth above in the Supplemental Information and which will be published shortly by EPA.

The suspension of OSM's statement of the exemption and the adoption of the applicable elements of EPA's exemption will make the enforcement of the TSS limit more complex, but will achieve the same degree of environmental protection as the current interim regulations provide. When a violation of the TSS limits is observed and documented, the burden remains on the mine operator to demonstrate that the discharge is exempted. In order to show this the mine operator must show, first that he or she has designed, constructed, and maintained the facility to contain or treat the volume of water which would run off into the pond during a 10-year 24-hour or greater precipitation event. Second, the mine operator must show that there has been an actual overflow, increase in volume of a discharge, or discharge from a by-pass system caused by a precipitation event. In order to do this, the operator may be required to produce concrete evidence such as photographs, hydrographs, weir measurements, baseflow data, etc., to show that the overflow, increase in volume, or bypass was caused by a precipitation event. Conclusory, self-serving statements will not suffice to justify an exemption. Moreover, since the operator must show that the discharge was caused directly by a precipitation event, pumping from the pond by the operator would not qualify for an exemption.

Field determination of whether an operator qualifies for an exemption will be left to the judgment of the inspector. Until such time as OSM adopts more specific design criteria for determining the adequate size of sediment ponds. OSM will utilize the major technical publications in the field to interpret the phrase "designed, constructed, and maintained to contain

or treat the volume of water which would fall... during a 10-year 24-hour or larger precipitation event (or snowmelt of equivalent volume)..." on a case-by-cited in the Preamble to the Permanent Regulations at 44 FR 15142 to 15148 (March 13, 1979), especially those numbered 50, 53, 61, 62, 72, 141, 143, 144, 145, and 146. Notices of violations or cessation orders as appropriate will be written for effluent limitations violations, unless the inspector determines that the exemption applies. Appeal of an inspector's action will, of course, be available to operators and citizens through the administrative review process.

It is important to note what this rainfall exemption does not do. First, it has no effect on the requirement of 30 CFR 715.17(a) and 717.17(a) that all drainage from the disturbed area, including disturbed areas that have been graded, seeded, and planted, must pass through a sediment pond or ponds. Thus, there is no change in the OSM requirement of treatment through the reclamation process. Second, the use of the applicable elements of EPA's exemption does not apply to any applicable limitation other than TSS. Third, the exemption does not relieve the mine operator of either treating water from the undisturbed area above the mining area that mixes with water from the disturbed area or diverting that water from the undisturbed area around and away from the pond. If an operator does not divert, his or her pond must be designed, constructed and maintained to hold or treat the entire volume of runoff that reaches the pond in the proscribed precipitation event in order to qualify for the exemption.

There are portions of 30 CFR 715.17(e) and 717.17(e) promulgated on May 25, 1979, and presently pending before the District Court for approval that are not here suspended. Those portions would require that sedimentation ponds have a minimum sediment storage capacity specified by the regulatory authority and that the sediment be removed from those ponds at a frequency specified by the regulatory authority. They would also impose certain safety criteria on ponds. OSM will press the District Court for approval of those remaining portions of 30 CFR 715.17(e) and 717.17(e). When approved, OSM will also enforce those requirements.

EFFECT ON STATE PROGRAMS

OSM is concerned that the submission and approval of State programs proceed expeditiously without imposing an undue burden on the States and associated parties that may be affected by those areas where the suspension is proposed. This general guidance is offered to assist the States in preparing their programs for submission. OSM believes that effluent limitations, the rainfall exemption, and pond safety and size criteria will ordinarily be dealt with by a State in regulation rather than statute. Therefore, this suspension should pose no difficulty in preparation of State statutes, provided State statutes will allow the adoption of the necessary regulations.

The State program as a whole -- statute and regulations together -- must meet the following minimum criteria with respect to sediment control and sediment ponds. First, the program must provide that all discharge from the disturbed area will pass through a pond or ponds. Second, the applicable effluent limitations must be met. Third, the safety construction requirements must be met. Fourth, all other provisions of hydrologic balance requirements of the Act and regulations must be met. OSM anticipates that any pond that meets these standards is likely to qualify as an existing structure under 30 CFR 701.11(e) of the permanent program regulation and therefore will be exempted from reconstruction in the permanent program.

OSM will provide States an opportunity to amend or modify State programs or State program proposals should the Federal regulations dealing with pond size not be amended in sufficient time for States to include corresponding regulations in their State programs in their initial submission. Authorities for such adjustments include the provisions for modifications of proposals during the initial stage of program review in accordance with 30 CFR 732.11; for conditional approval under 30 CFR 732.13; or program amendment under 30 CFR 732.17.

Dated: December 21, 1979.

Joan Davenport,
Assistant Secretary, Energy and Minerals .

NOTICE OF SUSPENDED REGULATIONS

LEGAL AUTHORITY .

Sections 101, 102, 201, 501, 503, 504, 505, 506, 507, 508, 509, 510, 515, 516, 517, 523, and 701, Surface Mining Reclamation Act of 1977, P.L. 95-87, 30 U.S.C. 1201, 1202, 1211, 1251-1260, 1265-1267, 1273, 1291.

PORTIONS OF THE FOLLOWING REGULATIONS ARE HEREBY SUSPENDED OR REVOKED, AS LISTED BELOW:

SECTION 715.17(a)(1) [AMENDED]

A. The following language is suspended insofar as it applies to TSS discharges:

“(1) Any overflow or other discharge or surface water from the disturbed area within the permit area demonstrated by the permittee to result from a precipitation event larger than 10-year, 24-hour frequency event will not be subject to the effluent limitations of paragraph (a).”

SECTION 715.17(e)(2) [AMENDED]

B. The Following language is revoked:

"... equal to --

“(i) The accumulated sediment volume from the drainage are to the pond for a minimum of 3 years, sediment storage volume shall be determined using the Universal Soil Loss Equation, gully erosion rates, and the sediment delivery ratio converted to sediment volume, using either the sediment density or other empirical methods derived from regional sediment pond studies if approved by the regulatory authority; or

“(ii) 0.1 acre-foot for each acre of disturbed area within the upstream drainage or a greater amount if required by the regulatory authority based upon sediment yield to the pond. The regulatory authority may approve a sediment storage volume of not less than 0.035 acre-foot for each acre of disturbed area within the upstream drainage area, if the person who conducts the surface mining activities demonstrates that sediment removed by other sediment control measures is equal to the reduction in sediment storage volume.”

SECTION 715.17(E)(3) [AMENDED]

C. The following language is revoked:

"...Theoretical detention time is defined as the average time that the design flow is detained in the pond; and is further defined as the time difference between the centroid of the inflow hydrograph and the centroid of the outflow hydrograph for the design event. Runoff diverted under sections 715.17(c), and 715.17(d), away from the disturbed drainage areas and not passed through the sedimentation pond need not be considered in sedimentation pond design. In determining the runoff volume, the characteristics of the mine site, reclamation procedures, and onsite sediment control, practices shall be considered. Sedimentation ponds shall provide a theoretical detention time of not less than twenty-four hours, or any higher amount required by the regulatory authority, except as provided under subparagraphs (i), (ii), or (iii) of this paragraph.

“(i) The regulatory authority may approve a theoretical detention time of not less than 10 hours, when the person who conducts the surface mining activities demonstrates that --

“(A) The improvement in sediment removal efficiency is equivalent to the reduction in detention time as a result of pond design. Improvements in pond design may include but are not limited to pond configuration, in-flow and out-flow facility locations, baffles to decrease in-flow velocity and short-circuiting, and surface areas; and

“(B) The pond effluent is shown to achieve and maintain applicable effluent limitations.

“(ii) The regulatory authority may approve a theoretical detention time of not less than 10 hours when the person who conducts the surface mining activities demonstrates that the size distribution or the specific gravity of the suspended matter is such that applicable and maintained.

“(iii) The regulatory authority may approve a theoretical detention time of less than 24 hours to any level of detention time, when the person who conducts the surface mining activities demonstrates to the regulatory authority that the chemical treatment process to be used --

“(A) Will achieve and maintain the effluent limitations; and

“(B) Is harmless to fish, wildlife, and related environmental values.

“(iv) The calculated theoretical detention time and all supporting documentation and drawings used to establish the required detention times under the subparagraph (3)(i) -- (iii) of this Section shall be included in the permit application.”

SECTION 717.15(e)(4) [AMENDED]

D. The following language is revoked;

"... and shall have a discharge rate to achieve and maintain the required theoretical detention time.

SECTION 717.15(e)(8) [AMENDED]

E. The following language is revoked:

"... when the volume of sediment accumulates to 60 percent of the design sediment storage volume. With the approval of the regulatory authority, additional permanent storage may be provided for sediment and/or water above that required for the design sediment storage. Upon the approval of the regulatory authority for those cases where additional permanent storage is provided above that required for sediment under Paragraph (2) of this Section, sediment removal may be delayed until the remaining volume of permanent storage has decreased to 40 percent of the total sediment storage volume provided the theoretical detention time is maintained."

SECTION 717.17(a)(3)(i) [AMENDED]

F. The following language is suspended insofar as it applies to TSS discharges:

"(i) Any overflow or other discharge of surface water from the disturbed area within the permit area demonstrated by the permittee to result from a precipitation event larger than the 10-year 24-hour frequency event will not be subject to the effluent limitations of paragraph (a)."

SECTION 717.17(e)(2) [AMENDED]

G. The following language is revoked:

"... equal to --

"(i) The accumulated sediment volume from the drainage area to the pond for a minimum of 3 years or the life of the pond, whichever is greater. Sediment storage volume shall be determined using the Universal Soil Loss Equation, gully erosion rates, and the sediment delivery ratio converted to sediment volume. Conversions shall use either the sediment density or other empirical methods derived from regional sediment pond studies may be used if approved by the regulatory authority; or

"(ii) 0.1 acre-foot for each acre of disturbed area within the upstream drainage area or a greater amount if required by the regulatory authority based upon sediment yield to the pond. The regulatory authority may approve sediment storage volume of not less than 0.0035 acre-foot for each acre of disturbed area within the upstream drainages area, if the person who conducts the underground mining activities has demonstrated that sediment removed by other sediment control measures is equal to the reduction in sediment storage volume; and

"(iii) The accumulated sediment volume necessary to retain sediment for 1 year in any discharge from the underground mine passing through the pond."

SECTION 717.17(e)(3) [AMENDED]

H. The following language is revoked:

"... Theoretical detention time is defined as the average time that the design flow is detained in the pond; and is further defined as the time difference between the centroid of the inflow hydrograph and the centroid of the outflow hydrograph for the design event. Runoff diverted under Section 717.17(c) and 717.17(d) away from the disturbed drainage areas and not passed through the sedimentation pond, need not be considered in a sedimentation pond design. In determining the runoff volume, the characteristics of the mine site, reclamation procedures, and onsite sediment control practices shall be considered. Sedimentation ponds shall provide a theoretical detention time of not less than twenty-four hours, or any higher amount required by the regulatory authority, except as provided under Paragraphs (1), (ii), or (iii) of this Subsection.

“(i) The regulatory authority may approve a theoretical detention time of not less than 10 hours, when the person who conducts the underground mining activities demonstrates that --

“(A) The improvement in sediment removal efficiency is equivalent to the reduction in detention time as a result of pond design. Improvements in pond design may include but are not limited to pond configuration, in-flow and out-flow facility locations, baffles to decrease in-flow velocity and short-circuiting, and surface areas; and

“(B) The pond effluent is shown to achieve and maintain applicable effluent limitations.

“(ii) The regulatory authority may approve a theoretical detention time of not less than 10 hours when the person who conducts the underground mining activities demonstrates that the size distribution or the specific gravity of the suspended matter is such that applicable effluent limitations are achieved and maintained.

“(iii) The regulatory authority may approve a theoretical detention time of less than 24 hours to any level of detention time, when the person who conducts the underground mining activities demonstrates to the regulatory authority that the chemical treatment process to be used --

“(A) Will achieve and maintain the effluent limitations;

“(B) Is harmless to fish, wildlife, and related environmental values;

“(iv) The calculated theoretical detention time and all supporting documentation and drawings used to establish the required detention times under Subparagraphs (3)(iii) of this Section shall be included in the permit application.”

SECTION 717.17(e)(4) [AMENDED]

I. The following language is revoked:

“... and shall have a discharge rate to achieve and maintain the required theoretical detention time.”

SECTION 717.17(e)(8) [AMENDED]

I. The following language is revoked:

“... when the volume of sediment accumulates to 60 percent of the design sediment storage volume. With the approval of the regulatory authority additional permanent storage may be provided for sediment and-or water above that required for the design sediment storage. Upon the approval of the regulatory authority for those cases where additional permanent storage is provided above that required for sediment under Paragraph (2) of this Section, sediment removal may be delayed until the remaining volume of permanent storage has decreased to 40 percent of the total sediment storage volume provided the theoretical detention time is maintained.”

PORTIONS OF THE FOLLOWING REGULATIONS ARE SUSPENDED, AS EXPLAINED BELOW:

SECTION 816.42(b) [AMENDED]

A. The following portion of 30 CFR 816.42(b) is suspended insofar as it applies to TSS discharges:

“(1) The discharge is demonstrated by the discharger to have resulted for the precipitation event equal to or larger than a 10-year 24-hour precipitation event; and

“(2) The discharge is from facilities designed, constructed, and maintained in accordance with the requirements of this Part.”

SECTION 816.46(b), (c), (d) AND (h) [AMENDED]

B. 30 CFR 816.46(b)

“... equal to --

“(1) The accumulated sediment volume from the drainage area to the pond for a minimum of 3 years. Sediment storage volume shall be determined using the Universal Soil Loss Equation, gully erosion rates, and the sediment volume, using either the sediment density or other empirical methods derived from regional sediment pond studies if approved by the regulatory authority; or

“(2) 0.1 acre-foot for each acre of disturbed area within the upstream drainage area or a greater amount if required by the regulatory authority based upon sediment yield to the pond. The regulatory authority may approve a sediment storage volume of not less than 0.035 acre-foot for each acre of disturbed area within the upstream drainage, if the person who conducts the surface mining activities demonstrates that sediment removed by other sediment control measures is equal to the reduction in sediment storage volume.”

C. 30 CFR 816.46(c)

“... Theoretical detention time is defined as the average time that the design flow is detained in the pond; and is further defined as the time difference between the centroid of the inflow hydrograph and the centroid of the outflow hydrograph for the design event. Runoff diverted under Sections 816.43 and 816.44, away from the disturbed drainage areas and not passed through the sedimentation pond need not be considered in sedimentation pond design. In determining the runoff volume, the characteristics of the mine site, reclamation procedures, and onsite sediment control practices shall be considered. Sedimentation ponds shall provide a theoretical detention time of not less than twenty-four hours, or any higher amount required by the regulatory authority, except as provided under subparagraphs (1), (2), or (3) of this paragraph.

“(1) the regulatory authority may approve a theoretical detention time of not less than 10 hours, when the person who conducts the surface mining activities demonstrates that --

“(i) The improvement in sediment removal efficiency is equivalent to the reduction in detention time as a result of pond design. Improvements in pond design may include but are not limited to pond configuration, in-flow and out-flow facility locations, baffles to decrease in-flow velocity and short-circuiting, and surface areas; and

“(ii) The pond effluent is shown to achieve and maintain applicable effluent limitations.

“(2) The regulatory authority may approve a theoretical detention time of not less than 10 hours when the person who conducts the surface mining activities demonstrates that the size distribution or the specific gravity of the suspended matter is such that applicable effluent limitations are achieved and maintained.

“(3) The regulatory authority may approve a theoretical detention time of less than 24 hours to any level of detention time, when the person who conducts the surface mining activities demonstrates to the regulatory authority that the chemical treatment process to be used --

“(i) Will achieve and maintain the effluent limitations; and

“(ii) Is harmless to fish, wildlife, and related environmental values.

“(4) The calculated theoretical detention time and all supporting documentation and drawings used to establish the required detention times under subparagraphs (c)(1)-(3) of this Section shall be included in the permit application.”

D. 30 CFR 816.46(d)

“... and shall have a discharge rate to achieve and maintain the required theoretical detention time.

E. 30 CFR 816.46(h)

“... when the volume of sediment accumulates to 60 percent of the design sediment storage volume. With the approval of the regulatory authority additional permanent storage may be provided for sediment and/or water above that required for the design sediment storage. Upon the approval of the regulatory authority for those cases where additional permanent storage is provided above that required for sediment under Paragraph (b) of this Section, sediment removal may be delayed until the remaining volume of permanent storage has decreased to 40 percent of the total sediment storage volume provided the theoretical detention time is maintained.”

SECTION 817.42(b) [AMENDED]

F. The following portion of 30 CFR 817.42(b) is suspended insofar as it applies to TSS discharges:

“(1) The discharge is demonstrated by the discharger to have resulted from a precipitation event equal to or larger than a 10-year, 24-hour precipitation event; and

“(2) The discharge is from facilities designed, constructed, and maintained in accordance with the applicable requirements of this Part.”

SECTION 817.46(b) and (c) [AMENDED]

G. 30 CFR 817.46(b)

"... equal to --

“(1) The accumulated sediment volume from the drainage area to the pond for a minimum of 3 years of the life of the pond whichever is greater. Sediment storage volume shall be determined using the Universal Soil Loss Equation, gully erosion rates, and the sediment delivery ratio converted to sediment volume. Conversions shall use either the sediment density or other empirical methods derived from regional sediment pond studies may be used if approved by the regulatory authority; or

“(2) 0.1 acre-foot for each acre of disturbed area within the upstream drainage area or a greater amount if required by the regulatory authority based upon sediment yield to the pond. The regulatory authority may approve a sediment storage volume of not less than 0.035 acre foot for each acre of disturbed area within the upstream drainage area, if the person who conducts the underground mining activities has demonstrated that sediment removed by other sediment control measures is equal to the reduction in sediment storage volume; and

“(3) The accumulated sediment volume necessary to retain sediment for 1 year in any discharge from the underground mine passing through the pond.”

H. 30 CFR 817.46(c)

"... from a 10-year, 24-hour precipitation event (design event), plus the average inflow from the underground mine. Theoretical detention time is defined as the average time that the design flow is detained in the pond; and is further defined as the time difference between the centroid of the inflow hydrograph and the centroid of the outflow hydrograph for the design event. Runoff diverted under sections 817.43 and 817.44 away from the disturbed drainage areas and not passed through the sedimentation pond, need not be considered in sedimentation pond design. In determining the runoff volume, the characteristics of the mine site, reclamation procedures, and onsite sediment control practices shall be considered. Sedimentation ponds shall provide a theoretical detention time of not less than twenty-four hours, or any higher amount required by the regulatory authority, except as provided under Paragraphs (1), (2) or (3) of this Subsection.

“(1) The regulatory authority may approve a theoretical detention time of not less than 10 hours, when the person who conducts the underground mining activities demonstrates that --

“(i) The improvement in sediment removal efficiency is equivalent to the reduction in detention time as a result of pond design. Improvements in pond design may include but are not limited to pond configuration, in-flow and outflow facility locations, baffles to decrease in-flow velocity and short-circuiting, and surface areas; and

“(ii) The pond effluent is shown to achieve and maintain applicable effluent limitations.

“(2) The regulatory authority may approve a theoretical detention time of not less than 10 hours when the person who conducts the underground mining activities demonstrates that the size distribution or the specific gravity of the suspended matter is such that applicable effluent limitations are achieved and maintained.

“(3) The regulatory authority may approve a theoretical detention time of less than 24 hours to any level of detention time, when the person who conducts the underground mining activities demonstrates to the regulatory authority that the chemical treatment process to be used --

“(i) Will achieve and maintain the effluent limitations; and

“(ii) Is harmless to fish, wildlife, and related environmental values.

“(4) The calculated theoretical detention time and all supporting documentation and drawings used to establish the required detention times under Subparagraphs (c)(1)-(3) of this Section shall be included in the permit application.”