

**FEDERAL REGISTER: 56 FR 65612 (December 17, 1991)**

DEPARTMENT OF THE INTERIOR

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

30 CFR Parts 761, 780, 784, 785, 816 and 817

Surface Coal Mining and Reclamation Operations; Permanent Regulatory Program; Areas Unsuitable for Mining; Special Categories of Mining; Surface Mining Activities; Underground Mining Activities

ACTION: Final rule.

**SUMMARY:** The Office of Surface Mining Reclamation and Enforcement (OSM) of the U.S. Department of the Interior (DOI) is amending its permanent program permitting and performance standards regulations in several technical areas. The technical areas affected are (1) Backfilling and grading, (2) Approximate original contour (AOC) variances, (3) Disposal of coal mine waste, (4) Definition of values incompatible with surface coal mining operations, (5) Disposal of excess spoil on preexisting benches, and (6) Contemporaneous reclamation practices. Except for the area of disposal of excess spoil on preexisting benches, the amendments are in response to U.S. District Court and Court of Appeals decisions.

In the area of values incompatible with surface coal mining operations, the rule amends the definition of "no significant recreational, timber, economic, or other values incompatible with surface coal mining operations" to eliminate reclaimability as a criterion in determining compatibility with surface coal mining operations.

In the area of AOC variances, the rule revises regulations governing permits incorporating variances from AOC restoration requirements to limit their application to steep slope mining.

In the area of disposal of excess spoil on preexisting benches, the rule revises special regulations governing the disposal of excess spoil on preexisting benches for conformance with OSM's generic backfilling and grading regulations. OSM is revising the rules to encourage the reclamation of abandoned highwalls by removing impediments to the use of excess spoil on preexisting benches.

In the area of disposal of coal mine waste, the rule revises former requirements for the disposal of coal mine waste by adding the requirement that coal mine waste be hauled or conveyed for final placement to the point of disposal. This addition prohibits the final placement of coal mine waste by end or side dumping in any area other than mine workings and excavations. The rule also removes regulatory language cross-referencing the requirements for handling of hazardous noncoal coal mine waste in accordance with the Environmental Protection Agency's (EPA's) Resource Conservation and Recovery Act (RCRA) and its implementing regulations.

In the areas of contemporaneous reclamation and backfilling and grading, the final rule reestablishes backfilling and grading time and distance requirements. The rules require the completion of backfilling and grading within certain times or distances following coal removal, or, for mining methods other than area and contour mining under a schedule established by the regulatory authority, or under case by case time and distance variances approved by the regulatory authority. Also in the context of backfilling and grading to AOC, the rules define "thin overburden" and "thick overburden", and establish performance standards for backfilling and grading in areas of thin and thick overburden.

Finally, existing suspensions of previous regulations are removed where they are superseded by these final regulations.

EFFECTIVE DATE: January 16, 1992.

FOR FURTHER INFORMATION CONTACT: Mr. Dennis M. Hunter, Jr., Office of Surface Mining Reclamation and Enforcement, U.S. Department of the Interior, 1951 Constitution Ave. NW, Washington, DC 20240.

**SUPPLEMENTARY INFORMATION:**

- I. Background
- II. Discussion of Final Rule and Comments
- III. Procedural Matters

## I. BACKGROUND

These rules amend several technical areas in 30 CFR, chapter VII. These areas have been combined in this rulemaking for administrative convenience. Therefore, the pertinent legislative, regulatory and litigation background for each technical area is discussed separately below.

Where the discussion concerns similarly or identically constructed sections in part 816, which applies to surface mining activities, and part 817, which applies to underground mining activities, these sections are cited together in the heading as Sections 816. [ ] and 817. [ ]. In such cases the subsequent discussion, while only referring to Section 816. [ ], nevertheless applies identically to both parts 816 and 817 unless otherwise noted.

### A. SECTION 761.5 - VALUES INCOMPATIBLE WITH SURFACE COAL MINING OPERATIONS

Section 522(e)(2) of the Surface Mining Control and Reclamation Act of 1977 (SMCRA or the Act), *30 U.S.C. 1272(e)(2)*, with certain exceptions, prohibits surface coal mining operations

“on any Federal lands within the boundaries of any national forest [unless] the Secretary finds that there are no significant recreational, timber, economic, or other values which may be incompatible with such surface [coal] mining operations \* \* \*.”

The corresponding OSM permanent program regulation appears at 30 CFR 761.11(b).

In implementing this requirement, the 1979 OSM regulations at 30 CFR 761.5 defined the emphasized language in section 522(e)(2) in part to mean:

“[T]hose significant values which could be damaged by, and are not capable of existing together with, surface coal mining operations because of the undesirable effects mining would have on those values, either on the area included in the permit application or on off-site areas which could be affected by mining \* \* \*.” (*44 FR 15341*, March 13, 1979).

On June 10, 1982 (*47 FR 25278*) OSM proposed, and on September 14, 1983 (*48 FR 41312*) OSM promulgated, a rule revising the 1979 definition. The revised definition dropped the introductory term "no" as unnecessary, changed the phrase "significant values" to "values to be evaluated for their significance," changed the term "offsite areas which could be affected by mining" to "affected areas," and of particular relevance to this proposed rule, inserted after the word "damage" the phrase "beyond an operator's ability to repair or restore."

Thus, following revision in 1983, the corresponding portion of the definition read:

“Significant recreational, timber, economic, or other values incompatible with surface coal mining operations means those values to be evaluated for their significance which could be damaged beyond an operator's ability to repair or restore by, and are not capable of existing together with, surface coal mining operations because of the undesirable effects mining would have on those values, either on the area included in the permit application or on other affected areas.” 30 CFR 761.5 (1983).

This revised definition was challenged by the citizen and environmental plaintiffs in *In re Permanent Surface Mining Regulation Litigation (In re Permanent II (Round III))*, *620 F. Supp. 1519 at 1556-57* (D.D.C. July 15, 1985). The challengers contended that the definition was contrary to the Act because under it mining could be permitted in national forests as long as reclamation was possible. The U.S. District Court for the District of Columbia agreed with this contention and remanded the definition. *Id. at 1557*. On November 20, 1986, (*51 FR 41952*) OSM suspended the definition "insofar as the listed values are evaluated for compatibility solely in terms of reclaimability." *Id. at 41960-41961*.

OSM appealed, and the U.S. Court of Appeals for the District of Columbia Circuit affirmed the district court ruling. *National Wildlife Federation (NWF) v. Hodel*, *839 F. 2d 694, 751-53 (D.C. Cir. 1988)*. Like the district court, the court of appeals ruled that the revised regulation was contrary to the intent of the Congress and to elementary principles of statutory construction.

On October 31, 1988 (*53 FR 43970*), OSM proposed to revise the Section 761.5 definition of "no significant recreational, timber, economic, or other values incompatible with surface coal mining operations" in conformance with the district court and court of appeals decisions.

## **B. SECTIONS 785.16, 816.133(D), AND 817.133(D) -- AOC VARIANCES**

Section 515(b)(3) of the Act, *30 U.S.C. 1265(b)(3)*, generally requires

“\* \* \* all surface coal mining and reclamation operations [to] backfill, compact (where advisable to insure stability or prevent leaching of toxic materials), and grade in order to restore the approximate original contour of the land with all highwalls, spoil piles, and depressions eliminated (unless small depressions are needed in order to retain moisture to assist revegetation or as otherwise authorized pursuant to this Act).”

For steep slope mining, section 515(d)(2), *30 U.S.C. 1265(d)(2)*, imposes an additional requirement for

“[c]omplete backfilling with spoil material \* \* \* to cover completely the highwall and return the site to the approximate original contour \* \* \*.”

The term "approximate original contour", as used in these sections, is defined in section 701(2) of the Act, *30 U.S.C. 1291(2)*, and in the regulations at 30 CFR 701.5 as "that surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area, including any terracing or access roads, closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain \* \* \*."

Sections 515(e)(1) through (e)(6) of the Act, *30 U.S.C. 1265(e)(1) through (e)(6)*, allow regulatory authorities to permit variances from AOC under certain circumstances. Section 515(e)(1) allows State regulatory programs, and requires Federal regulatory programs, to include procedures for permitting variances for the purposes set forth in section 515(e)(3). Section 515(e)(2) explicitly allows the regulatory authority to grant a variance from the steep-slope requirement of section 515(d)(2).

Accordingly, on March 13, 1979 (*44 FR 15372*), OSM promulgated at 30 CFR 785.16 a regulation which authorized the regulatory authority to grant a variance, when certain specified conditions were met, from AOC for steep slope mining which does not involve mountaintop removal. This regulation was challenged by the coal industry in *In re Permanent Surface Mining Regulation Litigation (In re Permanent I)*, No. 79-1144, slip op. at 69-70 (D.D.C. February 26, 1980), as unduly restrictive.

In upholding the Section 785.16 limitation of AOC variances to steep slope mining, the U.S. District Court for the District of Columbia in *In re Permanent I* said:

“Section 515(e) of the Act contains one variance provision: it applies to steep slopes. Rather than calling for a general variance mechanism, section 515(e)(1) establishes the right to apply for a variance \* \* \*. Section 514(e)(2) restricts the variance application to the contour restoration requirements of subsection 515(d)(2) (steep slopes). Whatever ambiguity may be read into section 515 is dispelled upon examination of the legislative history.” *Id.* at 69-70.

Subsequently, OSM reconsidered the legislative history of the Act and concluded "that the section allowing for AOC variances was not limited to steep slope operations." (*48 FR 39900*, September 1, 1983) Accordingly, OSM expanded the coverage of Section 785.16 to permit variances from AOC on both steep and non-steep slope terrain, (*48 FR 39892*, September 1, 1983) as amended at (*48 FR 44780*, September 30, 1983). At the same time (*48 FR 39892*, September 1, 1983) OSM revised its regulations governing postmining land use to include at 30 CFR 816.133(d) criteria for permitting variances in accordance with revised Section 785.16. OSM set out its rationale for these revisions in a detailed analysis of the legislative history of section 515(e), and of the issues considered by the district court in *In re Permanent I*, (*48 FR 39899-900*, September 1, 1983).

These revised regulations were challenged by the citizen and environmental plaintiffs in *In re Permanent II (Round III)*, *620 F. Supp. at 1574-78*. In response, the district court remanded the revised regulations "as inconsistent with law

to the extent they permit[ted] a variance beyond the variance for steep slopes embodied in 515(e)(2) [of the Act]." *Id. at 1577-78.*

On November 20, 1986 (*51 FR 41952*), OSM suspended Sections 785.16 and 816.133(d) insofar as they authorized any variance from AOC outside a steep slope area. The district court remand was appealed by the coal industry, and affirmed by the court of appeals in *NWF v. Hodel*, *839 F.2d at 761-64*. In affirming the district court, the court of appeals "rel[ie]d on the text of Section 515(e)(2), which specifically states that variances may be granted from the AOC requirements of section 515(d)(2), the steep slope mining provision; it does not, as enacted, state that non-steep slope mining AOC requirements may be waived or excused, and neither does it reference section 515(b)(3), the general AOC provision." *Id. at 763*. The court of appeals found nothing in the legislative history that would change its reading of section 515(e). *Id. at 764*.

On October 31, 1988, OSM proposed to revise Section 785.16, and to remove the suspension of that section and of Sections 816.133(d) and 817.133(d), in conformance with the district court and court of appeals decisions (*53 FR 43970*).

### **C. SECTIONS 816.74 AND 817.74 -- DISPOSAL OF EXCESS SPOIL ON PREEXISTING BENCHES**

Section 515(b)(22) of the Act, *30 U.S.C. 1265(b)(22)*, specifies the performance standards for disposing of excess spoil from surface coal mining and reclamation activities. Section 516(b)(10) of the Act, *30 U.S.C. 1266(b)(10)*, provides similar performance standards for underground mining activities.

OSM implements these statutory performance standards at 30 CFR 816.71 through 816.74 for surface mining activities and 30 CFR 817.71 through 817.74 for underground mining activities. Section 816.74 and Section 817.74, which are affected by this rule, govern the disposal of excess spoil on preexisting benches.

The 1979 OSM permanent program rules did not specifically provide for the disposal of excess spoil on preexisting benches. Regulations to allow the disposal of excess spoil on preexisting benches were originally proposed by OSM on May 16, 1980 (*45 FR 32331*). As a result of public comment, these regulations were repropoed in substantially different form on July 20, 1981 (*46 FR 37283*). Final regulations were issued on April 29, 1982 (*47 FR 18553*), as 30 CFR 816.75.

On June 8, 1982 (*47 FR 24954*), as part of an overall revision of its excess spoil regulations, OSM proposed to revise Section 816.75. The revised (and renumbered) regulations were promulgated on July 29, 1983 (*48 FR 32910*), as 30 CFR 816.74. Paragraphs (a) through (d) of these rules were essentially the same as the 1982 regulations. A new paragraph, (e), was added to allow the disposal of excess spoil from an upper, actively-mined bench to a lower, preexisting bench by means of gravity transport in certain circumstances.

In July 1986, OSM released a study titled, "Encouraging Abandoned Mine Reclamation Via Remining: A Federal, State and Industry Initiative" for public review and comment. On September 23, 1986, OSM held a public meeting in Washington, DC, to discuss the study's proposed initiatives. Copies of the study and a transcript of the public meeting have been placed in the administrative record for this rule.

One of the initiatives proposed in the study and discussed at the public meeting was "Reclaiming Abandoned Mine Lands with Excess Spoil." Included under this proposal was the disposal of excess spoil on preexisting benches, and, particularly, whether the requirements for such disposal were excessive as compared to the requirements for backfilling and grading. Both in written comments and at the public meeting, commenters pointed out that the differences in the rules were inconsistent with the similarity in topography, geology, and physical and engineering characteristics between preexisting and actively mined benches.

On October 31, 1988, OSM proposed revisions to Sections 816.74 and 817.74 to conform their requirements with the backfilling and grading requirements of Sections 816.102 and 817.102 (*53 FR 43970*).

## **D. SECTIONS 816.81, 816.89, 817.81, AND 817.89 -- DISPOSAL OF COAL MINE WASTE**

Recognizing the problems posed by improper disposal of coal waste, the Congress included in the Act a number of performance standards governing waste disposal. These performance standards appear in section 515 of the Act, *30 U.S.C. 1265*, for surface mining activities, and in section 516 of the Act, *30 U.S.C. 1266*, for underground mining activities.

To implement these statutory performance standards, the 1979 permanent program included at 30 CFR 701.5 a definition of "coal processing waste", and at 30 CFR 816.81 to 816.93 (*44 FR 15395 and 15422*, March 13, 1979), regulations governing the disposal of coal mine waste. Several changes in the 1979 regulations, which are not relevant to this discussion but are noted for completeness, were made on August 18, 1980 (*45 FR 54753*), and on November 20, 1980 (*45 FR 76932*).

On September 26, 1983 (*43 FR 44006*), OSM promulgated at 30 CFR 701.5 a revised definition of "coal processing waste", and new definitions of "coal mine waste", "impounding structure", and "refuse pile". At the same time (*48 FR 44006*), OSM promulgated at 30 CFR 816.81, 816.83, 816.84, 816.87 and 816.89, a comprehensive revision of the 1979 regulations. These new regulations were challenged in *In re Permanent II (Round III)*. *620 F. Supp. at 1534-38*.

*In re Permanent II (Round III)* involved two coal waste issues that are dealt with in this rulemaking: (1) Controlled transport of coal waste; and (2) Environmental Protection Agency (EPA) regulations on hazardous wastes.

### **1. SECTIONS 816.81(a) and 817.81(a) -- CONTROLLED TRANSPORT OF COAL WASTE**

In *In re Permanent II (Round III)* the district court rejected Sections 816.81(a) and 817.81(a) as arbitrary and capricious to the extent they allowed end or side dumping of coal mine waste, a mining practice in "hill and valley" topographic areas of placing material at a disposal site by means of gravity. *620 F. Supp. at 1534-35*.

On November 20, 1986 (*51 FR 41952*), OSM suspended Sections 816.81(a) and 817.81(a) insofar as they allowed end or side dumping of coal mine waste. On October 31, 1988 (*53 FR 43970*), OSM proposed to amend these sections by prohibiting end or side dumping of coal mine waste in regard to final placement disposal, and to simultaneously remove the suspension of the earlier version in conformance with the district court decision.

### **2. SECTIONS 816.89(d) and 817.89(d) -- EPA REGULATIONS ON HAZARDOUS WASTES**

Section 816.89(d) of the 1983 regulations required that "any noncoal [coal] mine waste defined as 'hazardous' under section 3001 of the Resource Conservation and Recovery Act (RCRA) (Pub. L. 94-580, as amended) and 40 CFR part 261 shall be handled in accordance with the requirements of subtitle C of RCRA and any implementing regulations." (*48 FR 44006, 44030 and 44032*, September 26, 1983.) As OSM noted in the preamble to the final rule, this was done at the suggestion of the U.S. Environmental Protection Agency (EPA). *Id. at 44027*.

In *In re Permanent II (Round III)*, *620 F. Supp. at 1538*, the coal industry challenged this section of the regulations, which the district court remanded for lack of adequate notice and comment. The district court said:

Industry challenges this rule because it contends that Congress gave the Secretary exclusive responsibility to regulate every kind of waste at coal mines in SMCRA permits, and expressly provided that EPA's regulations for hazardous wastes under RCRA shall not be applied to coal mines.

The court need not spend much time detailing the statutory analysis because it concludes that the rule was promulgated without adequate notice and comment under the APA [(Administrative Procedure Act)] \* \* \*.

The Secretary \* \* \* did not respond to the Industry's APA challenge, but instead attempted to explain that the rule neither broadens nor diminishes the Secretary's rules on the disposal of noncoal [coal mine] waste. Industry takes a vastly different view of the effect of the regulation, and makes a lengthy argument that has nowhere been considered by the Secretary prior to this litigation. Second, Industry is able to point to legal and practical complications that result from the rules. *Id.*

On November 20, 1986 (*51 FR 41952*), OSM suspended Sections 816.89(d) and 817.89(d). OSM proposed to remove these sections from its regulations on October 31, 1988 (*53 FR 43970*).

#### **E. SECTIONS 816.100, 816.101, 816.104(a) and 816.105(a) -- CONTEMPORANEOUS RECLAMATION AND BACKFILLING AND GRADING**

Section 515(b)(16) of the Act, *30 U.S.C. 1265(b)(16)*, provides for general performance standards to require surface coal mining and reclamation operations to "insure that all reclamation efforts proceed in an environmentally sound manner and as contemporaneously as practicable with the surface coal mining operations."

In addition, section 515(b)(3) of the Act, *30 U.S.C. 1265(b)(3)*, with two exemptions, provides for general performance standards requiring that "all surface coal mining operations backfill, compact (where advisable to insure stability or to prevent leaching of toxic materials), and grade in order to restore the approximate original contour of the land with all highwalls, spoil piles, and depressions eliminated (unless small depressions are needed in order to retain moisture to assist revegetation or as otherwise authorized pursuant to this Act)."

As described under heading B., above, the phrase "approximate original contour" is defined as "that surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area, including any terracing or access roads, closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain \* \* \*."

The previously noted exemptions to the AOC restoration requirements of section 515(b)(3) pertain to operations involving either "thin" or "thick" overburden. With respect to thin overburden, section 515(b)(3) provides

“[t]hat in surface coal mining which is carried out at the same location over a substantial period of time where the operation transects the coal deposit, and the thickness of the coal deposits relative to the volume of the overburden is large and where the operator demonstrates that the overburden and other spoil and waste materials at a particular point in the permit area or otherwise available from the entire permit area is insufficient, giving due consideration to volumetric expansion, to restore the approximate original contour, the operator, at a minimum, shall backfill, grade, and compact (where advisable) using all available overburden and other spoil and waste materials to attain the lowest practicable grade but not more than the angle of repose, to provide adequate drainage and to cover all acid-forming and other toxic materials, in order to achieve an ecologically sound land use compatible with the surrounding region.”

With respect to thick overburden, section 515(b)(3) provides

“[t]hat in surface coal mining where the volume of overburden is large relative to the thickness of the coal deposit and where the operator demonstrates that due to volumetric expansion the amount of overburden and other spoil and waste materials removed in the course of the mining operations is more than sufficient to restore the approximate original contour, the operator shall after restoring the approximate contour, backfill, grade, and compact (where advisable) the excess overburden and other spoil and waste materials to attain the lowest grade but not more than the angle of response, and to cover all acid-forming, and other toxic materials, in order to achieve an ecologically sound land use compatible with the surrounding region and that such overburden or spoil shall be shaped and graded in such a way as to prevent slides, erosion, and water pollution and is revegetated in accordance with the requirements of this Act.”

The OSM permanent program promulgated on March 13, 1979 included regulations governing contemporaneous reclamation for surface mining activities at 30 CFR 816.100 (*44 FR 15411*), and backfilling and grading at 30 CFR 816.101, 816.102, 816.104 and 816.105 (*44 FR 15411-13*). Section 816.100 required reclamation efforts to occur as contemporaneously as practicable with mining operations. Section 816.101 provided time and distance schedules as general requirements for backfilling and grading. Sections 816.104 and 816.105 provided for the thin and thick overburden exemptions authorized by section 515(b)(3) of the Act.

On May 24, 1983 (*48 FR 23356*), OSM revised its regulations governing contemporaneous reclamation and backfilling and grading. The revision deleted Section 816.101 from the regulations, and added to Section 816.100 a provision authorizing regulatory authorities to establish schedules for defining contemporaneous reclamation. At the same time the numerical limits on thin and thick overburden that appeared in Sections 816.104 and 816.105, i.e., plus or minus twenty percent, were deleted (*48 FR 23355*, May 24, 1983).

The 1983 regulations were challenged in *In re Permanent Surface Mining Regulation (In re Permanent II (Round II))*, 21 *ERC* 1724, 1744-1746 (D.D.C. October 1, 1984). As a result, the U.S. District Court for the District of Columbia remanded the regulations governing contemporaneous reclamation (Section 816.100; 21 *ERC* at 1745-46), cut and fill terraces (Section 816.102(g); 21 *ERC* 1744-45), thin overburden (Section 816.104(a); 21 *ERC* at 1746), and thick overburden (Section 816.105(a); 21 *ERC* at 1746). Generally, the district court found that the remanded regulations lacked sufficient guidance to regulatory authorities beyond what was provided in the Act.

OSM appealed the district court ruling, and the court of appeals in *NWF v. Hodel* affirmed the remand with respect to contemporaneous reclamation and thin and thick overburden, but reversed with respect to cut and fill terraces. 839 *F.2d* at 734-739. The court of appeals said:

We hold, in accord with the Secretary, that the Act does not automatically and inevitably require him to 'flesh out' the prescriptions of sections 515(b)(3) and (b)(16). Nonetheless, we affirm the remand of the contemporaneous reclamation and thick and thin overburden regulations, for only with respect to terracing did the Secretary adequately explain why guidance beyond the statutory requirements sensibly could not be given to local regulators.

We note that the Act expressly commands the Secretary to flesh out certain statutory provisions \* \* \*. Nothing in the Act, however, expressly requires the Secretary to flesh out Sections 515(b)(3) or (b)(16). *Id.* at 734. (Emphasis in original).

"In short," the court of appeals continued,

"we read the Act, in light of its legislative history \* \* \* to afford the Secretary discretion, absent an express statutory instruction to regulate, to decide whether fleshing out is appropriate in light of other concerns. Chief among those concerns is the need to accommodate widely varying local conditions that will not admit of a single, nationwide rule \* \* \*." *Id.* at 735. (Footnote omitted).

\* \* \*Under [*Motor Vehicle Mfrs. Ass'n v. State Farm [Mut. Auto. Inc. Co., 463 U.S. 29, 43 (1983)]*] 'the agency must examine the relevant data and articulate a satisfactory explanation' for the revised regulations \* \* \*. The Secretary's accounting for his actions regarding the contemporaneous reclamation, and thin and thick overburden regulations fails to meet this standard; we do not find in the rulemaking record any identified factual basis for, or satisfactory explanation of, the Secretary's conclusion that the variety of local conditions warrants regulations on these matters that simply reiterate the relevant prescriptions in sections 515(b)(3) and (b)(16) of the Act. In contrast, we find that the Secretary adequately explained his revision of the terracing regulation. *Id.* at 735.

In affirming the district court remand of the contemporaneous reclamation regulations, the court of appeals said:

"Section 515(b)(16) of the Act directs mine operators to reclaim land 'as contemporaneously as practicable [to the] mining operations.' In 1979, the Secretary had issued both a general instruction that reclamation occur 'as contemporaneously as practicable with mining operations,' 30 CFR 816.100 (1982), and specific 'time and distance' standards for backfilling and grading spoil at contour and area strip mines, 30 CFR 816.101 (1982)." *Id.* (Footnotes omitted, brackets in original).

The 1983 revision retained the general prescription in Section 816.100, but eliminated Section 816.101 entirely \* \* \*. To support his deletion, the Secretary commented 'that "contemporaneous reclamation" is a relative term which must be interpreted by each State on the basis of the mining conditions in its territory.' \* \* \* Because Section 816.101 was devised to account for local differences, we do not find entirely satisfying, as an explanation for scrapping the regulations entirely, the observation that "'contemporaneous reclamation" is a relative term' whose precise meaning depends on local conditions. The core deficiency, however, is that the Secretary has published barely more than a conclusion that the variety of mining conditions across the nation made Section 816.101 of the regulations infeasible. *State Farm* requires a 'satisfactory explanation,' one that informs us why he drew his conclusion. The Secretary, in other words, if he determines there is no need to 'flesh out' the statute, must 'flesh out' his explanation so that we can review the rationality of his decision. *Id.* at 736. (Footnote omitted, emphasis in original).

In affirming the district court remand of the thin and thick overburden regulations, the court of appeals said:

“Section 515(b)(3) of the Act directs mine operators to return land to its 'approximate original contour.' The provision contains an exemption, however, for situations where the spoil is either so thin or thick relative to the coal seam that there is insufficient or too much spoil to permit return to approximate original contour.\* \* \* In 1979, the Secretary issued regulations that defined numerically when a variance from the approximate original contour requirement for too little or too much spoil could be granted. 30 CFR 816.104 and 816.105 (1982).”

In 1983, the Secretary eliminated the numerical definition, permitting a variance whenever the mine operator demonstrates that spoil is either 'insufficient' or 'more than sufficient' to restore land to its approximate original contour. 30 CFR 816.104 and 816.105 (1986). The sole support we have found for this revision is the Secretary's cryptic observation that '[t]he mathematical limit \* \* \* has proved to be impractical because of its preciseness.' \* \* \* We do not know from this unadorned statement why no adjusted (less precise) or alternate nationwide rule was ordered in place of the one found impractical. Absent fuller statement of the reason for the revision, we cannot intelligently determine whether the Secretary has a 'satisfactory explanation' for his action. *Id.* at 736-737. (Footnotes omitted, brackets in original).

OSM proposed to amend Sections 816.100, 816.104 and 816.105, and to add a new Section 816.101, on October 31, 1988 (*53 FR 43970*), in conformance with the district court and court of appeals decisions.

## **II. DISCUSSION OF FINAL RULE AND COMMENTS**

### **A. GENERAL COMMENTS**

One commenter requested a 60-day time extension to the comment period in order to allow adequate time to evaluate the nationwide effects of the proposed regulations. The comment period originally was scheduled to end on December 30, 1988. OSM acceded in part to this request by granting an extension of the comment period by 30 days. The extended comment period closed January 30, 1989 (*53 FR 52433*, December 28, 1988). OSM believes that this extension of time was adequate to meet the needs of the reviewers.

### **B. SECTION 761.5 DEFINITIONS - SIGNIFICANT RECREATIONAL, TIMBER, ECONOMIC, OR OTHER VALUES INCOMPATIBLE WITH SURFACE COAL MINING OPERATIONS**

The definition of "significant recreational, timber, economic, or other values incompatible with surface coal mining operations" in final Section 761.5 was not changed from that in the proposed rule. In response to the court of appeals decision upholding the district court remand of this definition (see related discussion in I. Background, under the heading A. Values Incompatible with Surface Coal Mining Operations), OSM has amended Section 761.5 to eliminate the phrase "beyond an operators ability to repair." In accordance with the courts' decisions, an operator's ability to reclaim the land may no longer be used as criterion for determining compatibility under this definition.

One commenter supported the deletion or reclaimability as required by section 522(e)(2) of the Act and court decisions. The commenter cautioned OSM against making further changes to this rule without providing for public comment. OSM thanks the commenter for submitting the cautionary remark. No changes have been made by OSM to Section 761.5 following its proposal of October 31, 1988.

### **C. SECTION 785.16 - PERMITS INCORPORATING VARIANCES FROM AOC: RESTORATION REQUIREMENTS FOR STEEP SLOPE MINING**

[Note: For related rulemaking, the reader is directed to heading J., entitled Sections 816.133 and 817.133 -- AOC Variances]

#### **1. SECTION HEADING**

This section heading for Section 785.16 has been revised as proposed by adding the phrase "for steep slope mining". The heading reads:

Section 785.16 Permits incorporating variances from approximate original contour restoration requirements for steep slope mining.

The revision is made to emphasize that variances from approximate original contour are authorized only for steep slope surface coal mining and reclamation operations.

## **2. SECTION 785.16(a)**

Final Section 785.16(a) limits the granting of AOC variances to "steep slope, surface coal mining and reclamation operations." The quoted phrase duplicates the corresponding wording of the 1979 regulation and is unchanged from the proposed rule. The November 20, 1986, suspension of Section 785.16 which prevented the variance from being applied in non steep slope areas is removed. The variance is itself now limited to steep slope areas.

The language in final Section 785.16(a) has been revised from the October 31, 1988 proposed language by adding a cross-reference to Section 816.105. This change was made in response to a comment as discussed below.

### **THICK OVERBURDEN**

A commenter recommended that Section 785.16(a) include a reference to Section 816.105, Backfilling and grading: Thick overburden, along with existing references to Sections 816.102, 816.104, 816.107, 817.102 and 817.107 because Section 816.105 contains the requirement that not less than AOC be achieved during backfilling and grading in thick overburden situations.

The cross-reference to Section 816.105 at Section 785.16(a) was inadvertently omitted from the October 31, 1988 proposed rule through a typographical error. A correction to the proposed rule was published (*54 FR 19632*, May 8, 1989), and the cross-reference to Section 816.105 is restored in the final rule.

### **RESTRICTION TO STEEP SLOPE AREAS**

A commenter stated that the proposed AOC and thin overburden rules do not account for coal operations in which the overburden is composed in part of noncoal economic minerals which are removed prior to coal extraction. In such cases, according to the commenter, insufficient spoil may remain with which to return to AOC. The commenter asserted that section 515(e)(1) of the Act does not restrict the granting of AOC variances to steep slope areas, and imposing that restriction is contrary to the purpose of the Act.

Contrary to the commenter's assertion that section 515(e)(1) of the Act does not limit AOC variances to steep slope areas, the Federal courts have consistently ruled that this section limits AOC variances to steep slope areas (see discussion at I. Background, under heading B. Sections 785.16, 816.133(d), and 817.133(d) -- AOC Variances). OSM will discuss the relationship between thin overburden and recovery of noncoal minerals in the section of this preamble that discusses the thin overburden exemption.

### **SMALL DEPRESSIONS**

A western commenter suggested that the scope of AOC variances be expanded in non steep slope areas to include small depressions needed to retain moisture for reclamation or approved postmining land uses such as livestock production which were felt to be authorized by section 515(b)(3). The commenter claimed that the alternative to such depressions is the construction of impoundments through the use of earthen dams and that such construction is not as cost effective or beneficial as depression development and increases the potential both for erosion on constructed slopes and spillways and for dam failure.

As previously noted, the courts have interpreted the provisions of section 515(e) of the Act as restricting AOC variances to steep slope areas. A discussion of the small depressions authorized by section 515(b)(3) is not germane to this rulemaking.

## **EFFECTS ON STATE PROGRAMS AND PERMITTED OPERATIONS**

The same commenter asserted that limiting variances from AOC to steep slope areas without regard to depression development would threaten the effectiveness of his State reclamation program.

In response to this concern, OSM reviewed the commenter's State program's amendment history. OSM found that the State did not have an approved program amendment which corresponded to previous Section 785.16 that allowed variances from AOC for non-steep slope areas. Accordingly, limiting variances from AOC to steep slope areas should not adversely affect that program.

Another commenter requested that OSM clarify in the final rule that Section 785.16 applies prospectively to operations applying for a permit as of the date a State adopts the rule in their program. The commenter pointed out that, in light of prior OSM regulations authorizing variances from AOC for non-steep slope areas, it would be unjust to apply the final rule retroactively to operations which had previously obtained such variances.

OSM cannot agree with the commenter's recommendation that the final rule be applied prospectively. As previously discussed, in I. Background B. Sections 785.16, 816.133(d), and 817.133(d) -- AOC Variances, the district and appeals courts have held that the Act restricts the AOC variance provisions of 515(e) to steep slopes. Thus, OSM has no discretion on the issue as to whether to apply the rule prospectively. On two previous occasions, OSM attempted to implement court decisions prospectively. Both attempts were overturned. *NWF v. Lujan*, Nos. 87-1051, 87-1814, and 88-2788, slip op. at 35-51 (D.C.C. February 12, 1990).

OSM further believes the commenter overestimates the impact the final rule will have on the coal industry. Previous Section 785.16, which authorized variances from the AOC requirement in non-steep slope areas, was not approved as an amendment to any State program between its promulgation on September 1, 1983, and its suspension by OSM on November 20, 1986.

From the time of promulgation of the previous rule on September 1, 1983 through its suspension on November 20, 1986, that rule was under legal challenge. Even if operators somehow relied upon variances granted under the 1983 rule, there can be little equity in relying upon a position not justified by statute, particularly when such position is contrary to a prior rule upheld by the courts as correctly interpreting the statute. Therefore, in the light of the 1985 district court remand of the 1983 rule as inconsistent with the Act to the extent that they permitted AOC variances in non-steep slope areas, OSM has no legal alternative but to revoke such variances.

### **D. SECTIONS 816.74 AND 817.74 - DISPOSAL OF EXCESS SPOIL: PREEXISTING BENCHES**

OSM is revising Section 816.74 to conform the requirements for the disposal of excess spoil on preexisting benches with the backfilling and grading requirements of Section 816.102 within the framework allowed by section 515(b)(22) of the Act. This action was prompted by public comment to an OSM study on remaining initiatives and at a related public meeting. (See related discussion in II. Background, under the heading, C. Disposal of Excess Spoil on Preexisting Benches.)

Comments to the proposed rule suggested that the proposal did not meet the minimum requirements of the Act contained in section 515(b)(22) governing the disposal of excess spoil. In substituting the backfilling and grading sections for the excess spoil disposal references in Section 816.74(a), several provisions required by the Act for disposal of excess spoil that do not have counterparts in the backfilling and grading regulations had to be restored. In preparing the final rule, many of those provisions which were formerly invoked through the cross reference to Section 816.71 have now been specifically included in Section 816.74.

OSM has maintained the principle of utilizing the backfilling and grading requirements wherever possible because preexisting benches are similar to active mining benches in the regulator controls required. The final rules contain no new regulatory requirements beyond the proposal. In some cases, as will be discussed later, proposed changes are being withdrawn because they could not be accommodated under current law.

Final Section 816.74 contains 7 paragraphs. Paragraphs (a) and (b), with one exception, are being issued as they were proposed. Final paragraph 816.74 (c) is the result of combining former paragraphs (b) and (c) with certain requirements from formerly cross-referenced provisions of 816.71 which had been proposed to be deleted but are being retained. Proposed paragraph (e) is being issued as paragraph (d) with one change in addition to the paragraph designation. Final paragraphs (e), (f), and (g) have been added to Section 816.74 to account for provisions in 816.71 which do not have counterparts in Section 816.102. Final paragraph (h) is former paragraph (e) which has been redesignated.

Table 1 contains a cross reference which shows the derivation of each section of the new final rules. This table also contains a column which shows where the change is explained.

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Table 1. - Cross Reference, Former Provisions vs New Provisions, Disposal of Excess Spoil on Preexisting Benches

Former provision	New provision	Section where change is discussed
816.71(a)	816.74(a)	816.74(a)
816.71(a)(1)	816.102(f)	816.74(a)
816.71(a)(2)	816.102(c), 816.74(c)	816.74(a), 816.74(c)
816.71(a)(3)	816.74(g)	816.74(g)
816.71(b)(1)	816.74(c)	816.74(c)
816.71(d)	Deleted	816.74(c)
816.71(e)(1)	816.74(b)	816.74(b)
816.71(e)(2)	816.74(c)	816.74(c)
816.71(e)(3)	816.102(g), 816.74(g)	816.74(a), 816.74(g)
816.71(e)(4)	816.102(h), 816.74(f)	816.74(a), 816.74(f)
816.71(e)(5)	816.102(f)	816.74(a)
816.71(f)(1)	816.74(d)(4)	816.74(d)(4)
816.71(f)(2)	816.43	816.74(d)
816.71(f)(3)	816.74(d)	816.74(d)
816.71(g)	816.102(j), 816.74(e)	816.74(a), 816.74(e)
816.71(h)	Deleted	816.74(c)
816.71(i)	816.102(e)	816.74(a)
816.74(b)	816.74(c)	816.74(c)
816.74(c)	816.74(c)	816.74(c)
816.74(d)(1)	816.74(d)(1)	816.74(d)(1)
816.74(d)(2)	816.74(d)(2)	816.74(d)(2)
816.74(e)	816.74(h)	816.74(h)
816.102(a)(4)	816.74(d)(3)	816.74(d)(3)

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## 1. SECTIONS 816.74(a) and 817.74(a)

Final Section 816.74(a) is being issued as proposed. In it, OSM has substituted references to the backfilling and grading rules in place of the references to the general requirements for the disposal of excess spoil.

Former Section 816.74(a) authorized the regulatory authority to approve the disposal of excess spoil on preexisting benches "provided that all the standards set forth in Section 816.71(a), (b)(1) [and] (d) through (i) . . . are met." The references to Section 816.71 contain the general requirements for the disposal of excess spoil. The final rule substitutes references to Section 816.102 (c), (e) through (h), and (j) for the Section 816.71 references. Section 816.102 contains the backfilling and grading counterparts to the excess spoil disposal regulations of Section 816.71. The substitution has the effect of conforming the requirements for disposal of excess spoil on a preexisting bench with the requirements for backfilling and grading spoil on an actively mined bench.

As proposed, OSM is adding a requirement to final Section 816.74(a) that the affected portion of the preexisting bench be permitted. Because Section 816.71 (a) requires that the disposal of excess spoil occur "within the permit area,"

and the substituted references to Section 816.102 do not refer to the permit area, final Section 816.74(a) has been written to explicitly require that "the affected portion of the preexisting bench is permitted." Thus, the final rule requires, as did the former rule, that the affected portion of the preexisting bench be permitted. This provision allows the affected area to be either within the permit area where the excess spoil was generated, or in a separately permitted area.

Section 816.102(c) requires compaction of material where advisable to ensure the stability of the spoil material and to prevent leaching of toxic materials. The section generally replaces the former requirement in Section 816.71(a)(2). OSM is adding to a later paragraph (816.74(c)) the requirement in Section 816.71(a)(2) that the spoil be placed in a controlled manner.

The reference to Section 816.102(e) requires that the disposal of coal processing waste and underground development waste be in accordance with Sections 816.81 through 816.83, except that a long term static safety factor of 1.3 be achieved. This reference replaces the former reference to Section 816.71(i) which provided similar requirements.

Section 816.102(f) protects surface and groundwater from the adverse effects of acid, toxic and combustible materials by requiring that exposed coal seams, acid or toxic forming materials and combustible materials be covered. The new reference replaces the reference to Sections 816.71(a)(1) and 816.71(e)(5) which have similar requirements.

Section 816.102(g) allows cut and fill terraces to be constructed in the backfill if certain conditions are satisfied. This reference replaces the provisions of Section 816.71(e)(3) which allowed cut and fill terraces on excess spoil disposal areas. Section 816.71(e)(3) contains a requirement that the outslope of the terrace be limited to a maximum slope of 2h:1v, a requirement not in Section 816.102(g). As proposed, OSM is deleting this limitation from cut and fill terraces constructed on preexisting benches. The limit on the outslope, as proposed, will be the angle of repose as detailed in Section 816.74(d)(2).

The reference to Section 816.102(h) allows small depressions to be constructed on the fill material. Section 816.71(e)(4) provided a similar authorization. The one difference between the two provisions is that Section 816.71(e)(4) prohibits the construction of permanent impoundments on excess spoil disposal areas. In the preamble to the proposed rule OSM explained:

"Although the rule would not explicitly prohibit permanent impoundments, Section 816.74(a) does not reference Section 816.102(i) which authorizes permanent impoundments in certain circumstances and the regulatory authority would not be authorized to allow permanent impoundments on preexisting benches." (53 FR 43975, October 31, 1988)

In response to a comment, which is addressed in the discussion of final Section 816.74(f), OSM is adding a paragraph, final Section 816.74(f), to the rule which prohibits permanent impoundments on preexisting benches.

The final rule references Section 816.102(j), the backfilling and grading rule for controlling stabilization and erosion. This replaces the requirement in Section 816.71(g) which addresses surface area stabilization, erosion and revegetation. The last sentence of Section 816.71(g) which requires that "[a]ll disturbed areas, including diversion channels that are not ripped or otherwise protected, shall be revegetated upon completion of construction" does not have a counterpart in Section 816.102 and has been added as proposed as final Section 816.74(e).

## **2. SECTIONS 816.74(b) and 817.74(b)**

Section 816.74(b) is being issued as proposed except for one change. The proposed rule required the removal of "vegetation." The final rule has been changed to require the removal of "vegetation and organic materials." This returns the final rule to the former language in Section 816.71(e)(1). The change from the proposal results from a comment which noted that the Act at section 515(b)(22)(B) requires the removal of all "organic matter". OSM agrees that there is a distinction between the terms "organic matter" and "vegetation." The final rule, therefore, requires removal of all vegetation and organic material as required by the former rules and the statute.

Final Section 816.74(b) requires the removal of all vegetation and organic material from the affected portion of the preexisting bench prior to the placement of the excess spoil; it cross-references the permanent program topsoil performance standards at 30 CFR 816.22; and it allows the use of topsoil substitutes in accordance with Section 816.22(b) where insufficient topsoil is available on the preexisting bench.

Formerly, the cross reference to Section 816.71(e)(1) provided for the removal of vegetative and organic materials prior to the placement of excess spoil, the removal, segregation, storage and redistribution of topsoil, and the use of organic material as mulch or as an additive to topsoil. These requirements are not in Section 816.102, therefore, they have been added as final Section 816.74(b).

### **3. SECTIONS 816.74(c) and 817.74(c) (Proposed as Sections 816.74 (b) and (c) and 817.74 (b) and (c))**

Final Section 816.74(c) contains six provisions which state --

- The fill shall be designed and constructed using current, prudent engineering practices.
- The design shall be certified by a registered professional engineer.
- Spoil shall be placed only on the solid portion of the bench.
- Spoil shall be placed in a controlled manner and concurrently compacted as necessary.
- The spoil shall achieve a long term static safety factor of 1.3.
- Spoil deposited on any fill portion of a bench shall be treated as excess spoil under Section 816.71.

a. The fill shall be designed and constructed using current, prudent engineering practices. Final Section 816.74(c)'s first sentence tracks the language of Section 816.74(c) with the phrase "and constructed" added. As proposed, the specialized inspection requirements in Section 816.71(h) for excess spoil are being replaced by the normal inspection requirements for all permitted areas. OSM is also adding through the new rule a requirement that fills be constructed using current, prudent engineering practices. The additional language is included in response to a comment to the proposed rules which expressed concern over the deletion of the inspections formerly required by Section 816.74(a)'s reference to Section 816.71(h).

The environmental hazards posed by disposing of excess spoil on the solid portion of existing level benches are no greater than the hazards posed by backfilling spoil on an active bench. A regulatory authority inspects backfilling of active benches under the requirements in 30 CFR 840.11. These inspections have proven to be an effective means of controlling against the hazards of backfilling on an active bench and of ensuring compliance with the performance standards and with the reclamation plan. OSM believes that these inspections will be an equally effective means of protecting against the hazards posed by disposing of excess spoil on preexisting benches. Therefore, the final rule replaces the inspections described in Section 816.71(h) with the normal inspection process described in Section 840.11. OSM continues to believe that the additional safeguards provided in Section 816.71(h) are appropriate for those excess spoil disposal areas which pose significantly greater risk of environmental harm such as valley fills and head-of-hollow fills.

b. The design shall be certified by a registered professional engineer. The second provision of final Section 816.74(c) provides for the certification of the design by a registered professional engineer. OSM did not include this requirement in its proposed rule. However, certification is required for all excess spoil disposal areas by section 515(b)(22)(H) of the Act as was pointed out by a commenter to the proposed rule. Certification was formerly required by cross reference to Section 816.71(b)(1). In order to retain the statutory requirement while avoiding cross reference to the excess spoil rules, the sentence is being added to this paragraph.

The new rule uses the term "registered professional engineer" instead of the term "qualified registered professional engineer" which appears in Section 816.71(b)(1). In 1983 when Section 816.71 was published, the preamble explained that OSM had found some practicing registered professional engineers involved in design and certification of excess spoil fills who did not have sufficient experience to certify all phases of design and construction (*48 FR 32913*, July 19, 1983). OSM continues to believe that the risks posed by certain types of excess spoil disposal areas require specialized knowledge beyond the minimum standards posed by state certification boards. The particular specialized knowledge needed for excess spoil fills relates to the design of the underdrain system to prevent water infiltration from springs or seeps into the fill and the design of rock toe buttress or keyway cuts to insure stability of the fill on a downslope. However, these risks do not exist when excess spoil is disposed on the solid level foundation required to invoke this rule. For this reason, this rule only provides that the design be certified by a registered professional engineer. OSM does not mean to suggest that the registered professional engineer does not have to be qualified. OSM intends merely that the

qualifications necessary to design the disposal of excess spoil on a solid level pre-existing bench may not necessarily be the same as those required for the design and construction of structures covered by Section 816.71(b).

c. Spoil shall be placed only on the solid portion of the bench. This requirement was proposed as Section 816.74(c). It formerly appeared as Section 816.74(b). Some concern was expressed by commenters that preexisting benches may contain areas composed of filled areas which may not have the stability of true rock floored benches. The rules being issued today only apply to disposal on solid preexisting benches. Although the requirement for foundation examinations in Section 816.71(d) has been deleted as proposed, the professional engineer responsible for designing the fill and the regulatory authority approving the permit are still responsible for ensuring that disposal under these rules is limited to solid portions of the bench. In order to invoke the provisions of this section, the professional engineer's design must certify that the disposal area is a solid bench. Therefore, any foundation analysis necessary to establish the qualification of the proposed disposal site under this section must have already been performed and any additional foundation analysis would be redundant.

d. Spoil shall be placed in a controlled manner and concurrently compacted as necessary. The proposed rule did not require, as does the statute in section 515(b)(22)(A) and the former rules in Section 816.71(e)(2) placement in a controlled manner and concurrent compaction as necessary. OSM has added these provisions in the final rules as required by the Act. The former rules provide for this requirement in Section 816.71(e)(2). Additional discussion on spoil placement and compaction is given in response to a comment at 12.b of this rulemaking.

e. The spoil shall achieve a long-term static safety factor of 1.3. Excess spoil disposed on preexisting benches must achieve a long-term static safety factor of 1.3. Obtaining a minimum long-term safety factor of 1.3 is a general requirement for all backfilling and grading as specified in Section 816.102 and was a requirement for disposal of excess spoil on preexisting benches in prior Section 816.74(c).

f. Spoil deposited on any fill portion of a bench shall be treated as excess spoil under Section 816.71. The final sentence has been added in response to a comment to provide further guidance on situations in which there are both a solid bench and a fill area to be used to dispose of excess spoil. In such cases the solid portion of a preexisting bench is governed by Section 816.74 while the fill portion is governed by Section 816.71.

#### **4. SECTIONS 816.74(d) and 817.74(d) (Proposed as Sections 816.74(e) and 817.74(e))**

Final Section 816.74(d) (1) and (2) require that the preexisting bench be backfilled and graded to achieve the most moderate slope possible which does not exceed the angle of repose, and to eliminate the highwall to the maximum extent technically practical. These two paragraphs appear in the former rules and are being issued as proposed.

Final Section 816.74(d)(3) requires, as proposed, that the preexisting bench be backfilled and graded to "[m]inimize erosion and water pollution both on and off the site." This paragraph picks up the backfilling and grading provision at Section 816.102(a)(4), which is not otherwise referenced by the rule. This requirement protects the hydrologic balance.

Proposed Section 816.74(d)(4) required that the preexisting bench be backfilled and graded to "[p]revent water infiltration into the backfill from springs, water courses, or seeps, and ensure stability." This corresponded with the requirements of Section 816.71(f) which had been referenced by former Section 816.74(a). Final Section 816.74(d)(4) has been changed to quote the language from Section 816.71(f)(1). The language of final Section 816.71(d)(4) is closer to the statutory requirement of section 515(b)(22)(D) than the proposed language. The other two requirements formerly referenced by Section 816.74, that is, Section 816.71(f)(2) and Section 816.71(f)(3), are expressly incorporated into the final rule through the provisions of Section 816.74(d)(4). Section 816.71(f)(2) provides only a cross reference to Section 816.43 which applies in all cases to permitted areas. Section 816.71(f)(3) provides design standards for underdrains when they are needed. The preamble to the final Section 816.71(f)(3) clearly states that:

"these specific requirements apply to all underdrain systems whether or not the disposal area falls within the definition of a head-of-hollow or valley fill." (48 FR 32917, July 19, 1983)

(See the preceding discussion of Section 816.74(a).) A comment relevant to issues addressed in this paragraph appears under section 12.d of this rulemaking.

## **5. SECTIONS 816.74(e) and 817.74(e) (Proposed as Sections 816.74(f) and 817.74(f))**

Final Section 816.74(e) is being issued as proposed with the exception that its section number has been changed as noted above. It requires that

“[a]ll disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.”

This adds as an express provision to Section 816.74 the last sentence of Section 816.71(g), which was formerly referenced in Section 816.74(a). (See preceding discussion of Section 816.74(a).)

## **6. FORMER SECTIONS 816.74(e) and 817.74(e)**

Former Section 816.74(e) is redesignated as final Section 816.74(h). The proposed rule redesignated Section 816.74(e) as Section 816.74(g).

## **7. SECTIONS 816.74(f) and 817.74(f)**

Final Section 816.74(f) prohibits the construction of permanent impoundments on preexisting benches backfilled with excess spoil. As stated in the preamble to the proposed rule and as mentioned earlier in the discussion of Section 816.74(a), it is OSM's policy to prohibit the construction of permanent impoundments on preexisting benches backfilled with excess spoil. However, the proposed rule did not explicitly prohibit impoundments constructed on excess spoil as the former rules did. In response to the suggestion of a commenter, OSM is explicitly stating that policy by adding such a prohibition as Section 816.74(f).

## **8. SECTIONS 816.74(g) and 817.74(g)**

Final Section 816.74(g) requires that the

“[f]inal configuration of the backfill must be compatible with the natural drainage patterns and the surrounding area and support the approved postmining land use.”

This section is issued in response to a comment received and comports with the requirements of section 515(b)(22)(G) of the Act. Similar requirements were specified at formerly referenced Sections 816.71(e) (2) and (3), and replicate others found at Section 816.102(a)(5) but not cross-referenced. OSM agrees that the provision is needed for completeness and has included it with the final rules.

## **9. SECTIONS 816.74(h) and 817.74(h) (Proposed as Section 816.74(g) and Section 817.74(g))**

Former Section 816.74(e) is redesignated as final Section 816.74(i).

## **10. CONFORMING CHANGES TO PARTS 780 AND 784**

After review of the proposed rules, OSM determined that additional conforming changes are required. OSM is making three changes to these permitting rules to accommodate the changes proposed and made to the performance standards at final Section 816.74.

a. Section 780.14(c). OSM is inserting "816.74(c)" into the list of cross referenced sections which are excepted from this rule allowing qualified registered professional engineers, professional land geologists or land surveyors to prepare and certify cross sections, maps and plans. Included among these exceptions is a reference to Section 816.71(b) which, after today's rule, no longer applies to the disposal of excess spoil on preexisting benches. The effect of the insertion of Section 816.74(c) into Section 780.14(c) would be to continue the previous exception afforded by the reference to Section 816.71(b). The insertion of Section 816.74(c) would require that the cross sections, maps and plans prescribed

by Section 780.14(c) for the disposal of excess spoil on preexisting benches be certified by a registered professional engineer. This would make consistent the permitting and performance standards certification requirements for such disposal on preexisting benches.

b. Section 780.35. Section 780.35 governs the disposal of excess spoil. OSM is adding a phrase to the start of paragraph (b) which will read "[e]xcept for the disposal of excess spoil on preexisting benches,". The change conforms the permitting requirements for disposal of excess spoil on preexisting benches at Section 780.35 to the changes made to the performance standards for disposal of excess spoil on preexisting benches at Section 816.74. The deletion from Section 816.74 of the foundation analysis formerly required by its reference to Section 780.71(d), as discussed earlier, obviates the need for a permit application to submit the results of a geotechnical investigation.

Preexisting bench areas used for the disposal of excess spoil are, of course, still subject to all the other permit application requirements that apply to surface coal mining operations including the requirement of Section 780.35(a) to submit a description (with maps and drawings) of the disposal area. As discussed earlier, the use of Section 816.74 to govern an excess spoil disposal site is limited to those areas which are established as solid, rock floored benches by the design certified by the registered professional engineer.

c. Section 784.23(c). OSM is inserting "817.84(c)" into the list of cross referenced sections which are excepted from this rule allowing qualified registered professional engineers, professional land geologists or land surveyors to prepare and certify sections, maps and plans. Included among these exceptions is a reference to Section 817.71(b) which, after today's rule, no longer applies to the disposal of excess spoil on preexisting benches. The effect of the insertion of Section 817.74(c) and Section 784.23(c) would be to continue the previous exception afforded by the reference to 817.71(b). The insertion of Section 717.74(c) would require that the cross sections, maps and plans prescribed by Section 784.23(c) for the disposal of excess spoil on preexisting benches be certified by a registered professional engineer. This would make consistent the permitting and performance standards certification requirements for such disposal on preexisting benches.

## **11. OTHER COMMENTS**

A commenter, supportive of the proposed rule, noted that the proposed revisions remove a significant impediment to reclaiming previously mined areas. The commenter also recommended OSM not apply the rule in a manner that would discourage voluntary reclamation by industry through no-cost AML contracts with the State Regulatory Authorities (SRA).

The requirements in this final rule for the disposal of excess spoil material on preexisting benches are designed to parallel the backfilling and grading rules and to provide an incentive for industry to reclaim preexisting areas which otherwise may not be reclaimed through re-mining. OSM has no intention to apply this rulemaking in a manner that would discourage voluntary reclamation by industry. Any disposal of excess spoil from active mining operations must be performed in accordance with the requirements of this rule and any other applicable requirements of the regulatory program and the Act. The use of no-cost contracts under the Abandoned Mine Lands Program however is not germane to this rulemaking since projects supervised under that program are not subject to jurisdiction under title V.

Several commenters expressed concern about the placement of excess spoil on preexisting benches many preexisting benches are, in part, fill benches resulting from the pushing of material over the outslope. Since fill benches often lack the stability to support further placement of spoil material, the commenters fear that excess spoil will be placed on the fill portion of the preexisting benches, not just on the rock bench, and will create the potential for mass movement.

Other commenters indicated they believed, in general, that the proposed rules adequately address foundation preparation and placement requirements. Nevertheless, these commenters also emphasized that care should be taken to insure that excess spoil material be placed only on the solid portion of the bench.

OSM recognizes that there are areas where there is material on the downslope from previous mining operations. There are also areas where material from previous operations remains on the bench. Therefore, OSM expressly states in final Sections 816.74(c) and 817.74(c) that this section of the rules only applies when excess spoil is placed on the solid portion of a bench and that Section 816.17 applies when excess spoil is placed on a fill portion. OSM has included in the final rule a requirement that the design must be certified by a registered professional engineer. This is a requirement of

the former rules but was not included in the proposed rule. OSM is retaining the professional engineer certification because of the need to establish that the foundation of the preexisting bench is a solid foundation.

A commenter stated that the proposed rule would encourage preexisting highwall reclamation without sacrificing environmental quality. However, the commenter recommended inclusion of the contemporaneous requirements of 30 CFR 816/817.100 as well as the time and distance limitations of proposed Section 816.101.

OSM agrees the proposed language will encourage the reclamation of preexisting highwalls. While the general principles of contemporaneous reclamation in Section 816.100 apply to all surface coal mining operations, the specific schedules in 816.101 for area and contour mines do not apply to disposal of excess spoil on preexisting benches.

Commenters also raised a related issue of seepage and its adverse affect on stability of the backfilled areas and, therefore, strongly recommended OSM create a separate provision for disposal of excess spoil on preexisting benches incorporating the ten (10) requirements described and discussed below.

a. The disposal area must be permitted and bonded. OSM agrees. Proposed and final Section 816.74(a) require the disposal areas to be permitted. Section 30 CFR 800.11(a) requires that all areas of the permit be covered by a bond prior to issuing the permit.

b. The spoil must be transported and placed in a controlled manner, compacted concurrently and in such a way as to assure mass stability and to prevent mass movement, as required by section 515(b)(22) of the Act. Section 515(b)(22)(A) specifies that

“Spoil [be] transported and placed \* \* \* in position for concurrent compaction and in such a way as to assure mass stability \* \* \*.”

OSM agrees it is necessary to require spoil to be placed in a controlled manner and, if necessary for stability, compacted concurrently. The language of the Act does not, however, require concurrent compaction as the commenter alleges. Section 515(b)(22) specifies that

“spoil [be] transported and placed \* \* \* in position for concurrent compaction and in such a way as to assure mass stability. (emphasis added).”

The emphasized language does not specifically require concurrent compaction. It only requires that the spoil be placed in position for concurrent compaction. The manifest concern of this statutory provision is that mass stability be assured. Final Section 816.74(c) addresses that concern by providing that the spoil be placed in a controlled manner and compacted concurrently as necessary to attain the required stability. It may further be noted that the general requirements for disposal of excess spoil at Section 816.71 have contained a similar provision since their promulgation in 1979. (*44 FR 15311*, March 13, 1979). Final Section 816.74 (c) also provides that the fill shall be designed and constructed, using current, prudent engineering practices to attain a long-term static safety factor of 1.3 for all portions of the fill. Finally, the design must be certified by a registered professional engineer.

OSM also agrees that spoil must be transported and placed on preexisting benches "in such a way as to assure mass stability and to prevent mass movement." This means that under this section of the rules spoil may be placed only over rock floored portions of benches and not over fill areas which extend over the outslope. It also means that preexisting bench surfaces must be prepared prior to placement of the excess spoil. Preparation includes drainage of any existing impoundments and the removal of organic materials and vegetation. The regulatory authority has both the responsibility and the authority to require these actions under Sections 816 and 817.74 of the final rule and the Sections 816 and 817.102(c), (f) through (h), and (j) requirements cross-referenced therein.

c. All organic material must be removed prior to spoil placement as mandated by section 515(b)(22) of the Act. OSM agree. The requirement in Sections 816.74(b) and 817.74(b) of the final rule has been amended to add the term organic material to the term vegetation. Prior rules have used the terminology "vegetation and organic material" which is being retained in the final rule.

d. The disposal area must not contain springs, wet weather seeps, natural water courses or their lateral water discharges (i.e., from auger or old underground mine workings) unless section 515(b)(22)(D) of the Act is complied with. OSM agrees. The prevention of adverse effects from seepage on a backfill's stability is addressed in Sections 816.74(d)(4) and 817.74(d)(4) of the final rule. The final rule was changed from the proposed language to quote the requirement imposed by the former reference to Section 816.71(f)(1). Therefore there is no change to this existing requirement under the new rule.

e. The design of the spoil disposal area on the preexisting bench must be certified by a qualified registered professional engineer in conformance with professional standards, as mandated by section 515(b)(22)(H) of the Act, and not merely those fills using coal mine waste as proposed. OSM agrees. Final 816.74(c) provides that backfills must have their design certified by a registered professional engineer. Certification is a statutory requirement in section 515(3)(22)(H) of the Act which, while not in the proposed rule, is included in the final.

f. Standards for foundation and bench stability analyses for the proposed disposal area must be tailored to the nature of the proposed disposal areas. OSM agrees that preexisting bench disposal areas may differ depending on age and the mining methods employed during the past mining operation and may require different preparation prior to placing the spoil in the backfill. OSM remains satisfied that the performance standard in Section 816.74(c) for the use of prudent engineering practices during design and construction, coupled with a requirement to achieve a long term static factor of safety of 1.3 and limiting the rule to cover only disposal on the solid portion of the bench will provide the necessary regulatory controls to ensure stability. Nevertheless, the regulatory authorities may tailor additional program requirements to their individual needs. Further, nothing will prohibit the regulatory authority from conditioning permits with more stringent criteria based on site specific conditions.

g. There must be an explicit prohibition on the creation of permanent impoundments on preexisting benches. OSM agrees. Accordingly, proposed Sections 816.74 and 817.74 were revised by adding a new paragraph (f). The final rule expressly prohibits permanent impoundments on the backfill areas of preexisting benches. For further information see II. D. 8., addressing Sections 816.74(f) and 817.74(f), of this final rulemaking.

h. There must be a requirement that the final configuration of the backfill be compatible with the natural drainage pattern and surroundings and be suitable for its intended uses. OSM agrees. Since a similar requirement does not exist in Sections 816.102 and 817.102, OSM has added this requirement as Sections 816.74(g) and 817.74(g) of the final rule. As discussed earlier (II. D. 9. addressing Sections 816.74(g) and 817.74(g) of this final rulemaking) paragraph (g) of Sections 816.74 and 817.74 requires the final configuration of the backfill be compatible with the natural drainage patterns of the surrounding area and support the approved post mining land use.

i. There must be compliance with all other requirements of section 515(b)(22) of the Act. OSM agrees that compliance with the applicable requirements of section 515(b)(22) of the Act is necessary. Table 2 is a cross reference between the subsection of the Act and the former and new regulatory requirement.

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Table 2. - Cross Reference the Act Versus Former and New Implementing Rules for Excess Spoil Disposal

The Act provision	Former rule	New rule
515(b)(22)(A)	30 CFR 816.71(a)(2), (e)(2)	30 CFR 816.74(c), 816.102(c)
515(b)(22)(B)	816.71(a), (e)(1)	816.74 (a), (b)
515(b)(22)(C)	816.71(f)(1)	816.74(d)(4)
515(b)(22)(D)	816.71(f)(1)	816.74(d)(4)
515(b)(22)(E)*	Not applicable *	Not applicable *
515(b)(22)(F)*	Not applicable *	Not applicable *
515(b)(22)(G)	816.71(e)(2), (3)	816.74(g)
515(b)(22)(H)	816.71(b)(1)	816.74(c)
515(b)(22)(I)	816.71(a)	816.74(a)

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\* The Act sections 515(b)(22) (E) and (F) apply to slopes, OSM rules for disposal of excess spoil on preexisting benches only apply to solid portions of existing level benches.

j. There must be a requirement for inspection of the spoil disposal area prior to placement of spoil to ensure that factors which potentially could lead to the creation of an unstable fill are considered and properly treated. OSM agrees that factors which could lead to the creation of an unstable fill must be considered prior to approving a permit for the site. Inspection of the spoil disposal area prior to placement of spoil to ensure that such factors are properly treated is a reasonable measure. Final Section 816.74(c) requires that

“the fill shall be designed and constructed using current, prudent engineering practices \* \* \* be certified by a registered professional engineer \* \* \* and the spoil be placed \* \* \* to attain a long term static safety factor of 1.3 for all portions of the fill.”

These provisions ensure that the design and construction of spoil fills includes the proper treatment of factors which potentially could lead to the creation of an unstable fill.

## **E. SECTIONS 816.81, 817.81 AND 816.89, 817.89 COAL MINE WASTE: GENERAL REQUIREMENTS**

### **1. SECTION 816.81(a)**

OSM is amending Section 816.81(a) in response to the district court decision concerning end or side dumping of coal mine waste *In re Permanent II (Round III)*, 620 F. Supp. at 1534-38. As proposed, the final rule now requires that coal mine waste be "hailed or conveyed" instead of the former language which only required coal mine waste to be "placed." The final rule adds two additional phrases to the proposed rule. Both changes have been made in response to comments and will be discussed more fully later. First, the phrase, "disposed of in an area other than the mine workings or excavations" has been added to the first sentence of Section 816.81(a). Second, the phrase, "with final placement in a controlled manner" has been added to the second sentence of Section 816.81(a).

OSM believes the final placement of coal mine waste by end or side dumping is inherently dangerous. As discussed in the preamble to the 1979 rule (44 FR 15209, March 13, 1983), the lack of control over compaction when material is end or side dumped may lead to instability and permeability. Instability or permeability may in turn lead to combustion, erosion, and oxidation of pyrite resulting in water quality degradation. As will be discussed later in greater detail, OSM will allow controlled gravity transport of coal waste when its final placement is accompanied by such additional steps as may be required to meet the performance standards of Section 816.81.

OSM maintains, as it did in the preamble to the 1983 rule (48 FR 44011, September 26, 1983), that the controlled gravity transport of coal mine waste is consistent with the Act. The legislative history of the Act does not indicate that the Congress intended OSM to regulate the transportation of coal mine waste to the disposal site.

The practice of transporting coal mine waste to a disposal area through methods other than direct hauling is well documented in the technical literature. (See, for example, Engineering and Design Manual -- Coal Refuse Disposal Facilities, pp. 8.22-8.75, by E. D'Appolonia Consulting Engineers for the Mine Safety and Health Administration.) Accepted methods include conveyor belts and tramways, useful in mountainous terrain where haul road construction is difficult or where steep grades decrease the efficiency of individual hauling units. (See *id.* at p. 8.45; and Pit Slope Manual, "Chapter 9: Waste Embankments," p. 96, by the Canada Center for Mineral and Energy Technology.)

One commenter supported the language in Section 816.81(a) of the proposed rule which requires that coal mine waste must be hauled and conveyed and placed in a controlled manner. The commenter stated that the possibility of spontaneous combustion from improper compaction, increased potential for saturation and (stability) failure, and the difficulty of effectively and evenly compacting end dumped material, described in the 1979 preamble, continue to be valid reasons to reject end and side dumping of coal and to require controlled placement after hauling or conveying the waste.

On January 29, 1988, the D.C. Court of Appeals considered the threats of fill instability and spontaneous combustion. *NWF v. Hodel*, 839 F.2d 694, 731. The court upheld the 1983 revisions to 30 CFR 816.81 and 816.83 which eliminated the specific absolute design criteria prescribing compaction density, lift thickness and other "how to" rules on the basis of existing performance standards prescribing minimum satisfactory end results. The specific performance standards cited by the court as reasonably promoting fill stability and incombustibility were the requirements that the coal mine waste be placed in a controlled manner to prevent combustion and that the disposal facility be designed to obtain a minimum

long-term static safety factor of 1.5. 30 CFR 816.81(a)(5) and (c)(2). These performance standards continue in the current regulations.

The provisions of final Section 816.81(a)(1) that require coal mine waste to be "hailed or conveyed and placed for final placement in a controlled manner \* \* \*" preclude end and side dumping as a means of final placement of coal waste. As will be subsequently discussed in response to other comments, additional steps following the transportation of coal waste to a storage facility would invariably be required to achieve the performance standards specified in Section 816.81.

Four commenters objected to what they described as OSM's intention to regulate the transportation of coal waste by preventing the disposal of coal waste using end or side dumping. Those commenters asserted that Congress did not intend OSM to regulate the transport of coal waste and that the court did not ask OSM to prohibit end or side dumping, but only required OSM to explain why this practice is reasonable. One of these commenters also contended that OSM was reversing its position by preventing controlled gravity transport in the proposed rule. The commenter strongly recommended that OSM reevaluate the proposed rule and repropose it with adequate rationale in the preamble to support the rulemaking.

OSM believes that these commenters, in the main, have misunderstood the meaning of the terms "hailed or conveyed" as applied to this rule. "Hailed or conveyed" includes virtually all forms of transporting coal waste including trucks and systems such as conveyor belts and tramways. OSM is not prohibiting any form of transportation of coal waste but rather is regulating its final placement. OSM rules have sought to protect against the problems associated with coal mine waste which occur in its placement rather than its transportation. OSM is not changing that policy.

One commenter who objected to the proposed change asked whether additional steps taken by the operators following end or side dumping would be acceptable to OSM. The commenter stated that it is unclear from the preamble of the proposed rule whether end or side dumping is prohibited as a method of placement prior to spreading (i.e., transportation) or only as a method of final placement. The commenter suggested that, if end or side dumping is prohibited as a method of final placement and not transportation, OSM insert the phrase "with final placement in a controlled manner" after the terms "hailed or conveyed". This commenter also submitted that the use of conveyor belts and tramways should be considered acceptable methods of controlled placement of coal waste under any final rule.

In response to the commenter's suggestion, the words: "for final placement" have been inserted between the word "placed" and "in a controlled manner" in the final rule. OSM has made the addition to emphasize that the regulatory controls of activities which place the coal mine waste for disposal are distinguished from the regulatory controls for activities which transport coal mine waste to a storage facility. OSM is unaware of any means of transporting coal mine waste to a storage facility which would achieve the performance standards required by Section 816.81 for disposal without some additional steps being taken. These steps, however, may vary depending on the design of the disposal area, the individual site conditions, and the characteristics of the waste. However, the performance standards in Section 816.81 cannot be achieved by gravity alone, as would be the case if end or side dumping were the means of final placement. Therefore, while there may be a variety of acceptable ways of transporting the coal mine waste to the disposal area, the final placement of the coal mine waste must be controlled so that the disposal achieves all the performance standards in Section 816.81. Thus, final Section 816.81 will read

“[c]oal mine waste shall be hailed or conveyed and placed for final placement in a controlled manner to \* \* \*.”

One commenter stated that the rule does not apply to the material disposed in the mine workings or excavations as indicated in sections 515(b)(11) and 516(b)(4) of the Act. The commenter maintained that the rule applies only to the surface disposal of coal mine waste in areas other than the mine workings and excavations and recommended that appropriate rule language be added to this section to make that clear.

The commenter is correct. OSM does not intend for this rule to apply to material disposed in the mine workings or excavations. The language in proposed Section 816.81(a) has been changed by adding the phrase "disposed of in areas other than the mine working or excavation." The new text is taken from the statutory limitation on the application of these rules contained in sections 515(b)(11) and 516(b)(4) of the Act.

## **2. SECTIONS 816.89(d) and 817.89(d) - EPA REGULATIONS ON HAZARDOUS WASTE**

As proposed, OSM is deleting paragraph (d) from Sections 816.89 and 817.89. As stated in the Background section, these paragraphs were added to the regulations in 1983 and suspended in 1986 when the district court ruled that OSM had failed to follow the notice and comment provisions of the Administrative Procedures Act. The paragraphs required that any noncoal mine waste defined as "hazardous" under section 3001 of the Resource Conservation and Recovery Act (RCRA) must be handled in accordance with subtitle C and any implementing regulations of that Act.

OSM received two comments on the deletion. A commenter opposed the deletion on the basis that OSM was obligated to coordinate the implementation of the Act with other Federal laws, including RCRA, and must continue to require compliance by permit applicants with the applicable waste laws. Another commenter supported the deletion stating that the Act operates in concert with, but not in place of, other environmental laws and regulations.

Section 816.89(d) was originally issued at the request of EPA. In reassessing Section 816.89(d) for the purpose of this rulemaking, OSM has decided to delete the paragraph for the following reasons. The incorporation by reference of certain RCRA provisions in Section 816.89(d) would have required OSM and State regulatory authorities to assume permitting, inspection and enforcement responsibilities over those RCRA provisions which are assigned by Congress to EPA. Assuming those responsibilities is not required by the Act nor is it a task for which the Congress appropriates funds to OSM or the State regulatory authorities. Enforcing RCRA provisions requires regulatory units structured and staffed appropriate to the task, a task significantly different from regulating the environmental impacts of coal mining per se.

An operator's duties under RCRA regarding disposal of hazardous noncoal waste will continue to be regulated by EPA. OSM, for its part, will continue, consistent with its jurisdiction under the Act, to coordinate its regulatory program with EPA to facilitate the implementation of RCRA regulations.

## **F. SECTION 816.100 - CONTEMPORANEOUS RECLAMATION**

As proposed, the final sentence in Section 816.100 has been deleted. This change conforms Section 816.100 to the addition of Section 816.101. The sentence being deleted authorized the regulatory authority to establish schedules for defining contemporaneous reclamation. This authorization is being replaced with the guidance contained in Section 816.101.

## **G. SECTION 816.101 - BACKFILLING AND GRADING: TIME AND DISTANCE REQUIREMENTS**

On October 31, 1988, OSM proposed Section 816.101 which contained four paragraphs. Section 816.101(a) contained time and distance schedules for contour and area mines as well as provisions for the regulatory authority to establish schedules for other mining methods. Section 816.101(b) allowed the regulatory authority to submit alternative schedules in lieu of those in section (a). Section 816.101(c) defined the parameters under which alternative schedules submitted under section (b) would be evaluated. Section 816.101(d) allowed the regulatory authority to extend the backfilling and grading time limit for a portion of the permit area if the permittee demonstrated through the permit application that additional time was necessary.

On April 17, 1990, OSM published a Notice of Inquiry in the Federal Register to provide an opportunity for public comment on whether additional regulations were needed to control the contemporaneous reclamation of multiple seam and mountaintop removal mining operations (*55 FR 14319*, April 17, 1990). OSM published the Notice of Inquiry because of comments received on this proposed rule and reports of problems in enforcing contemporaneous reclamation at multiple seam and mountaintop sites. A further discussion of this notice of inquiry appears in section G. 5., Notice of Inquiry on Multiple Seam Mining and Mountaintop Removal Operations, of this preamble.

The final rule contains two paragraphs. As proposed, final Section 816.101(a) provides the time and distance schedules for area and contour mines and requires regulatory authorities to establish schedules for other mining methods permitted in their State. Final Section 816.101(b) authorizes the regulatory authority to approve extensions to time for rough backfilling and grading for a permit area or a portion of a permit areas, similar to proposed Section 816.101(d). OSM is withdrawing proposed Section 816.101(b) which would have allowed a regulatory authority to submit schedules in lieu of those in Section 816.101(a). Proposed Section 816.101(c) detailing the criteria to evaluate alternative schedules has likewise been withdrawn. As will be discussed later, OSM believes the language of the final rule, which is very similar

to the rule issued in 1979, provides sufficient guidance to States, while allowing sufficient flexibility to deal with any State- or site-specific problem.

## 1. SECTION 816.101(a) - TIME AND DISTANCE SCHEDULES

Final Section 816.101(a) contains time and distance schedules for contour and area mining and requires the regulatory authority to establish schedules for other methods of surface mining. For contour mining, Section 816.101(a)(1) requires the completion of backfilling and grading within 60 days or 1,500 linear feet following coal removal. For area mining, Section 816.101(a)(2) requires completion within 180 days following coal removal, and not more than four spoil ridges behind the pit being worked, the spoil from the active pit constituting the first ridge. Sections 816.101(a) (1) and (2) are identical to the proposed rule. Under Section 816.101(a)(3), backfilling and grading schedules for other mining methods shall be established by the regulatory authority. Any schedule established by the regulatory authority must incorporate an inspectable standard between coal removal and the completion of backfilling and grading.

One commenter wanted OSM to clarify that an operation completing the "rough" backfilling and grading stage, but not the final grading stage, would be considered to be in compliance with the time and distance requirements. The commenter also mentioned that final grading must at times be combined with topsoil placement and seeding in order to minimize erosion. Because the 1979 Federal rules recognized this distinction (*44 FR 15411*, March 13, 1979), the commenter requested OSM clarify the issue in this final rule.

OSM intends backfilling and grading to mean that all of the spoil material has been placed in the mined-out area and the backfilled material is ready for final-grading as specified in Section 816.102(j). Thus, backfilling and grading does not include final grading, placing topsoil, and seeding. The 1979 preamble and rules used the phrase "rough backfilling and grading" but did not explain the meaning of the term "rough". Since it was not explained in 1979, OSM chose not to include this wording in the proposed rule. In response to the commenter's request for clarification, OSM has adopted language similar to the 1979 rules; therefore, final Section 816.101 reads \* \* \* rough backfilling and grading for surface mining \* \* \*."

A commenter stated that time standards should be eliminated since the distance limitations were felt to be sufficient to ensure contemporaneous reclamation. The commenter believes that the elimination of time standards would eliminate difficulties in inspection related to tracking the number of days between coal removal and backfilling and grading.

OSM disagrees with the comment. The establishment of distance limits without concomitant time limits would not sufficiently ensure that contemporaneous reclamation would occur. For instance, an operator could cease coal extraction prior to proceeding four spoil ridges or 1,500 linear feet. In circumstances such as these, where a distance limit would not apply, a time limit would ensure that reclamation would proceed properly. Alleged enforcement difficulties do not constitute sufficient reason for OSM to retreat from this important performance standard. Moreover, required monthly inspections make it unlikely that the time limits will be abused to any great degree.

The commenter also stated that the term "coal removal" also needs to be defined, so that whatever time standard is applied, it is applied at a clearly defined point. The commenter stated that it is not clear if the time period starts when coal is removed from a point or if it starts when coal removal is completed for a cut or pit.

In a similar vein, several commenters asked OSM to clarify the phrase "following coal removal" for area mining so as to assure that reclamation follows disturbance of the land surface in a timely manner. Citing *Save Our Cumberland Mountains, Inc. (Rith Energy)*, *108 IBLA 70 (1989)*, these commenters objected to OSM's explanation in that case that the 180-day deadline for backfilling and grading did not start until after all mineable coal was removed from the mine cut. The commenters claimed the OSM's interpretation of "following coal removal" to mean following final removal of all coal from a pit, rather than from any point in the cut or pit, is in contradiction with the Secretary's 1979 interpretation and Congressional intent. Therefore, the commenters contended that reclamation of an area must follow within 180 days of the disturbance of land and coal removal at any point of land within the mine cut, rather than following removal of all coal within the mine cut or pit. On the other hand, another commenter suggested applying the 180 day limit only after final coal removal to ensure that the last pit or cut is reclaimed in a timely fashion.

The time and distance schedules for area and contour mining begin following the completion of coal removal. The phrase "following coal removal" means that no mineable coal is left in a particular area of the mine. In the Rith Energy

case, referred to by the commenter, the board held that backfilling and grading attaches to an area of land at the time of coal removal, and not at the time of final coal removal from a mining cut. *Id.* 108 IBLA at 80. Therefore, the key to enforcing time and distance schedules is to focus on the area of land rather than coal removal. Practical application of this concept requires that time and distance schedules be calculated from a moving "point", i.e., a small area, of a coal seam from which coal is being removed. In the case of multiple seam mining, the moving "point" would be established as coal is extracted from the lowest coal seam.

A commenter claimed that there is no justification given for the numerical time standards in Sections 816.101(a)(1) and (a)(2) (60 and 180 days, respectively, for contour and area mining). The commenter noted that contemporaneous reclamation is so dependent upon site-specific conditions (e.g., type of mining, equipment, geology, climate, speed of mining), that it cannot be tied to such specific time constraints as OSM proposed. Therefore, the commenter wanted OSM to outline steps for determining contemporaneous reclamation for each operation on a site-by-site basis. In the commenter's view the permit is the place to specify time standards because site and operating conditions are too variable for generic Federal or State rules to be appropriate.

Similarly, another commenter objected to the reimposition of nationwide time and distance requirements for completion of backfilling and grading operations at surface coal mining operations. The commenter stated that OSM deleted identical 1979 regulations in 1983 on the premise that the variety of local conditions in mining States precluded the imposition of national standards, and because the Act does not mandate uniform, nationwide time and distance requirements. The commenter pointed out that the legislative history of the Act fails to mention the necessity for nationwide time and distance requirements to define contemporaneous reclamation. The commenter asserted that it is apparent from the 1988 appeals court decision in *NWF v. Hodel*, 839 F.2d 694, (D.C. Cir. 1988) that the Act does not require a national time and distance standard. Therefore, OSM was asked to remove what the commenter described as the arbitrary reference to the nationwide standards, which bear no resemblance to on-the-ground conditions or to OSM's prior position.

The same commenter argued that OSM failed to provide adequate justification in the proposed rule for the reversal in agency position. The commenter insisted that OSM's reliance upon the States' requests for guidance on time and distance schedules and various State programs' adoption of the 1979, or more stringent standards, does not constitute sufficient justification for the rule change. The commenter claimed OSM's reliance upon such State action was flawed because (1) the States had to adopt the 1979 rules to keep their programs consistent with the rules of the Secretary and (2) the States have not wanted to change their rules while the issue remained in the courts and unsettled.

The commenter recommended OSM adopt rules which would allow States to set their own requirements for contemporaneous reclamation based on local conditions and would contain flexible standards to accommodate the distinct circumstances of individual surface coal mining operations.

In establishing a regulatory framework for implementing the Congressional prescriptions for contemporaneous reclamation at section 515(b)(16) OSM has, in the past, adopted two alternatives. In 1979, the regulations provided a nationwide limit on time and distance for contour and area mines and allowed for time limit extensions for specific permit areas in accordance with Section 780.18(b)(3). In 1983, OSM removed the time and distance limitations from the national program and provided regulatory authorities with the responsibility for determining schedules for their individual States. The legal challenge to this second alternative resulted in the district court's remand of the regulations for failure to provide States with sufficient guidance in defining contemporaneous reclamation beyond that which was provided in the Act. In *Re Permanent Surface Mining Regulation Litigation (II)*, No. 79-1144 (D.D.C. Oct. 1, 1984).

In affirming the remand with regard to contemporaneous reclamation, the circuit court held that, while the Act does not automatically and inevitably require the Secretary to "flesh out" the contemporaneous reclamation prescriptions of section 515(b)(3) and (b)(16), he did not adequately explain why guidance beyond the statutory requirements sensibly could not be given to local regulators. *NWF v. Hodel*, 839 F.2d 694, (D.C. Cir. 1988).

This final rule has a sufficient basis and purpose to be valid. The commenter who asserted that the Secretary failed to justify his reversal from his 1983 rules misconstrues the posture of the issue. The position taken in the 1979 rules on time and distance limits is the only one to which the current rule may properly be weighed against. The Secretary is not now required to justify a reversal from a 1983 policy which the court invalidated. OSM has always intended that there will be an inspectable contemporaneous reclamation standard which will apply to every mining site. In final Section 816.101(a)

OSM has reestablished national standards for area and contour mines (Section 816.101(a) (1) and (2)) and required the States to set State standards for other types of mining (Section 816.101(a)(3)).

Final Section 816.101 is modeled on the 1979 rules. The time and distance schedules for contour and area mining in final Section 816.101(a) are identical to those in the 1979 rule. The preamble to that rule (*44 FR 15226*, March 13, 1979), explained how these schedules were developed. Among other things, OSM stated that "(i)t is necessary to establish a maximum time limit for backfilling and grading to ensure that toxic-forming material in the spoil will not remain exposed to surface runoff over an indefinite period of time. *44 FR 15226 (1979)*. In light of the substantial additional experience gained with these rules at the State and Federal level since 1983, OSM has reconsidered their utility for providing workable national time and distance standards for which reasonable accommodations can be made for local differences. In this light, OSM has affirmed its earlier conclusions and modeled final Section 816.101(a)(1) and (2) after the 1979 rules.

Despite the commenter's assertions of the States' motivation for retaining the 1979 schedules, States, when given the option of removing them from their rules in 1983, did not do so. OSM believes the State rules were not changed because the 1979 provisions are viable and workable for a great majority of contour and area mines. These provisions and schedules simplify mine planning, bonding and inspecting and provide a uniform playing field across State lines for operations which are substantially similar in scope. Permit applicants have found retention of State program provisions governing time and distance schedules as an aid to complying with the permit information requirements of Section 780.18. Many permits cite the program time and distance schedule as a means of demonstrating their adherence to backfilling and grading reclamation timetable requirements. In short, where appropriate, nationwide standards have substantial administrative benefits for all concerned.

To the degree that flexibility is required, the final rule in Section 816.101(b) provides for such flexibility based upon specific showings by a permittee. This allows for site-specific conditions to be taken into account. For types of mining other than area and contour operations, the State is required to establish State standards in accordance with Section 816.101(a)(3). OSM has not defined national standards for mining operations other than area and contour mines. Limits for the remaining types of mining operations, if and where they are conducted, are to be determined on a state-by-state basis. OSM believes that contemporaneous reclamation standards for these operations are best defined by the State regulatory authority.

One commenter complained that, although area mining can be conducted either as a truck and shovel or as a dragline operation, the standard for contemporaneous reclamation of area mines in Section 816.101(a)(2) is suitable only for dragline operations. The commenter did not explain the basis for this opinion. OSM disagrees with this comment. In the case of area mining that uses truck and shovel operations, the four spoil ridge criteria would not apply but the time schedule would be appropriate to ensure contemporaneous reclamation.

On a similar tack, another commenter claimed the time and distance requirements for area mining are not adequate in all cases. This commenter wanted the rules to clarify that the 180-day period would not include periods when the operation is temporarily shut down through circumstances beyond the control of the operator (e.g., as a result of labor disputes, weather, etc.).

The provisions of 30 CFR 816.131 on temporary cessation are to be used for temporary shutdown. Anytime an operation is in temporary cessation for 30 days or more because of circumstances such as adverse weather or labor problems or similar reasons the person conducting the surface mining activity is required to notify the regulatory authority. Since the 30 day provision of Section 816.131 is within either the 60 or 180 day provisions of Section 816.101, there should be no conflict with this provision and the contemporaneous reclamation time limits.

Another commenter questioned the use of "or" instead of "and" in Section 816.101(a)(1). The commenter wondered if OSM really intended the time and distance requirements for backfilling and grading in contour mines to be alternatives (i.e., within 60 days or 1500 linear feet). Instead, the commenter suggested that "and" would be more suitable since its use would parallel its use in Section 816.101(a)(2) for area mines where backfilling and grading are to be completed with both a specified time and a specified distance.

There is no reason to change the conjunction of Section 816.101(a)(1) from "or" to "and". OSM believes that the meaning of this provision is clear that backfilling and grading must be completed within either 60 days or 1500 linear feet

following coal removal, whichever comes first.

To have interpreted Section 816.101(a)(1) otherwise would have opened its provisions to grave abuse. As previously noted, an operation could have ceased mining short of 1500 linear feet and never have been required to backfill and grade the disturbed area. Such a scenario would conflict with the intent of the Act to compel reclamation as "contemporaneously as practicable" (section 515(b)(16)), "and \* \* \* as possible." (Section 102(e)).

## **2. SECTION 816.101(a)(3) - SCHEDULES FOR OTHER MINING METHODS**

Final Section 816.101(a)(3) requires the regulatory authority to establish backfilling and grading schedules for other surface mining methods. This section requires a schedule if mining other than contour or area mining is being conducted within the State. Section 816.101(a)(3) has been revised from the proposed rule to clarify that schedules for mining methods other than contour or area mines also apply where OSM is the regulatory authority.

OSM interprets these provisions as requiring the regulatory authority establish schedules that are inspectable standards.

Because of the diversity which exists in types of operations and areas where such operations are conducted, it is infeasible to suggest that OSM establish national schedules for all methods of operations. The conditions placed on the regulatory authority are -- if the regulatory authority is going to approve permits for mining method other than contour and area mining -- then the regulatory program must contain an inspectable contemporaneous reclamation standard for the type of mining proposed.

At a public meeting, a commenter asked OSM to state in the preamble to the final rule that schedules for other mining methods are required, and not merely authorized, under proposed Section 816.101(a)(3). OSM acknowledges that the preamble to the proposed rule was not clear as to whether the development of schedules was required or merely authorized. However, the rule language, both proposed and final, is clear that regulatory authorities shall provide schedules for mining methods other than area and contour mining. OSM believes that final Section 816.101(a)(3) is clear that such schedules are required and not merely authorized.

A commenter asked what OSM will do in Tennessee (a Federal program State) as a result of proposed Section 816.101(a)(3) which provides for the establishment through the State program approval process of schedules for operations which are neither contour nor area operations. OSM agrees that the proposed rule language did not make it clear how, or whether, mining operations requiring schedules established by the regulatory authority are to be treated when OSM is the regulatory authority. Consequently, Section 816.101(a)(3) was revised to remove the word "state" from the phrase "state regulatory authority". OSM will establish the schedules for operations on Federal or Indian lands or a Federal Program State where OSM is the regulatory authority. For example, 30 CFR 942.816(e) contains the time and distance schedules for the State of Tennessee.

## **3. EXTENSIONS OF TIME FINAL SECTION 816.101(b) (Proposed as Section 816.101(d))**

Final Section 816.101(b), authorizes the regulatory authority to extend the time allowed for backfilling and grading for the entire permit area or for a specified portion of the permit area if the permittee demonstrates, in accordance with 30 CFR 780.18(b)(3), that additional time is necessary. OSM recognizes that not all mining operations can meet a time or distance limit set on either a national or State basis. However, the extension must be requested by the permit applicant, who must demonstrate its necessity in the permit application and it must be approved by the regulatory authority as a part of the permit process.

The 1979 rules at Section 816.101(a)(1) and (3) for contour and area strip mining, respectively, made similar provision for granting additional time (*44 FR 15411*, March 13, 1979). The preamble to those rules indicated the regulatory authority may allow additional time for rough backfilling and grading if, for example, the permittee demonstrates that the time limit established under Section 816.101(a) is too restrictive because of local conditions (*44 FR 15226*, March 13, 1979).

One commenter stated that the flexibility provided in proposed Section 816.101(d) (Final Section 816.101(b)) was needed to handle unexpected delays due to unique site specific conditions such as weather, equipment, and to protect the safety of the miners. However, the commenter also insisted that the regulations in proposed Section 816.101(d) should allow the regulatory authority to grant extensions for the entire permit area, and not limit such extensions to specific portions of the permit area. Also, another commenter wanted OSM to include special provisions for seasonal operations that backfill the previous mining area during the next operating period which may be 9 months later. The commenter stated that no backfill is available until the next pit is started and that the economics of coal extraction would be destroyed by having to backfill the existing pit before the start of the next pit.

OSM adopted the suggestion to modify final Section 816.101(b) to allow the regulatory authority to grant time extensions for the entire permit area instead of limiting that authority to a specified portion of the permit area. Final Section 816.101(b) is to be used by the regulatory authority to grant an extension because the operator cannot meet either the national standard for area or contour mines or the State standard for other types of mines because of the site-specific conditions of the permit area. In addition, these extensions are granted through the permit process in accordance with Section 780.18(b)(3). To reiterate an earlier point, extensions of time are not granted to accommodate temporary shut downs resulting from adverse weather, market condition, labor problems or similar reasons. These conditions are governed under the temporary cessation provisions of 30 CFR 816.131.

A commenter suggested adding a new subsection which would allow for a specific backfilling and grading schedule as part of a postmining land use change. The commenter wanted the regulatory authority to have the flexibility to approve schedules for specific land uses on a case-by-case basis. The commenter maintained that postmining land uses such as industrial land for utility ash disposal require detailed schedules for backfilling and grading which are outside of the norm.

Another commenter recommended extending the time and distance requirements where noncoal mining operations occur within the same pit area. The commenter cited an example where sand and clay are extracted above a seam of coal (lignite) by a different company than the one mining the lignite. Additional flexibility is required, the commenter stated, where more than one operation has valid rights in the same pit area.

OSM believes these comments illustrate why flexibility in the time and distance requirements for backfilling and grading the permit area is needed. The time and distance requirements for a permit area as those described above may be extended under final Section 816.101(b) for either an entire permit area or for a portion of a permit area, whichever is appropriate, depending on specific circumstances.

#### **4. WITHDRAWAL OF PROPOSED SECTIONS 816.101(b) and 816.101(c)**

OSM has withdrawn proposed Sections 816.101(b) and 816.101(c) in the final rule. Proposed Section 816.101(b) would have allowed a regulatory authority to establish, subject to the State program approval process, alternative backfilling and grading schedules in lieu of those prescribed in Section 816.101(a). Proposed Section 816.101(c) would have allowed regulatory authorities to incorporate one of two standards governing the completion of backfilling and grading in any schedule it established. The two standards were either a time interval or distance function.

As indicated in the preamble to the proposed rule, OSM considered providing this option in response to comments received during outreach briefings in which States, in their comments regarding backfilling and grading guidelines, asked to retain discretion in determining alternative schedules. These proposed provisions would have given State regulatory authorities the flexibility to adopt backfilling and grading schedules which meet State-specific conditions, but would not have established a standard for OSM to measure the sufficiency of the alternate schedules.

These proposals are withdrawn in favor of the final rules promulgated today. OSM believes the final rule's context of national schedules for area and contour mines, State schedules for other types of mining, and permit-based exemptions, when required, for special circumstances accomplishes the goal of ensuring contemporaneous reclamation while, at the same time, providing sufficient flexibility to adapt to special circumstances. After a careful analysis of the comments to the proposed rule, OSM has concluded that all potential problems with time and distance schedules could be accommodated under the final rule's structure and the additional flexibility provided in the proposed rule was unnecessary.

## 5. NOTICE OF INQUIRY ON MULTIPLE SEAM MINING AND MOUNTAINTOP REMOVAL OPERATIONS

On April 17, 1990, OSM published a Notice of Inquiry (NOI) in the Federal Register to provide an opportunity for public comment on whether additional regulations were needed to control the contemporaneous reclamation of multiple seam and mountaintop removal mining operations (*55 FR 14319*, April 17, 1990). OSM published the Notice of Inquiry because of comments received on this proposed rule and reports of problems in enforcing contemporaneous reclamation at multiple seam and mountaintop sites. According to the Notice, OSM was receiving reports from field inspectors about mine sites which appeared not to be contemporaneously reclaimed. In response to those complaints, OSM solicited public comments on whether to add information requirements to the permitting rules which would require specific data on the methods of mining and schedule for completion.

Promulgation of time and distance schedules in this rule is not intended to resolve the concerns raised in the NOI concerning contemporaneous reclamation at multiple-seam operations. The issues identified in the NOI were primarily associated with enforcing contemporaneous reclamation requirements prior to the commencement of the removal of coal from the lowest permitted seam. This rule does sufficiently address, however, what it was intended to cover: Contemporaneous reclamation of sites where coal removal from the lowest permitted seam has begun. Solutions to the issue raised in the April 1991 NOI are thus beyond the scope of the October 31, 1988 proposal, and need not be part of the basis and purpose of this rule.

Having examined the issues raised in the NOI in light of the comments received on the NOI, OSM has concluded that other existing OSM rules are sufficient to address the issues raised in the NOI. Therefore, OSM has decided not to initiate further rulemaking at this time. The sufficiency of other existing rules is explained in the following discussion. The discussion covers OSM permitting, enforcement, and oversight rules.

**How Existing Regulations Ensure Contemporaneous Reclamation. -- a. Permitting.** The permitting regulations in 30 CFR 780.18(b)(1) require a detailed timetable for the completion of each major step in the reclamation plan. Paragraph 780.18(b)(3) requires a plan for backfilling, soil stabilization, compacting and grading that shows the final surface contours of the proposed permit area. In the Notice of Inquiry, OSM considered amending the permitting information regulations to require more detailed information on the mining methods and backfilling and grading sequence and schedule. Three States commenting to the Notice of Inquiry believed that OSM has adequate regulations in place to ensure contemporaneous reclamation of multiple seam and mountaintop removal operations. One commented that further rulemaking is unnecessary and not likely to accomplish the intended goal.

One commenter to the Notice of Inquiry expressed the opinion that a review of the current regulations shows that OSM has already promulgated a very comprehensive set of requirements for the permitting of surface coal mining operations to assure contemporaneous reclamation. The commenter further stated that the provision of Section 780.18(b)(3) empowers State regulatory authorities to require that the operator fully remove all seams of coal and accomplish reclamation in a timely manner, in accordance with the timetable required in each permit.

OSM agrees with the commenter. In addition to Section 780.18, under which operators have to submit a reclamation plan for approval, 30 CFR 780.12 and 780.14 require the submittal of operation plans and maps describing the projected progress and sequence of the permitted operation. See, e.g., Section 780.14(b)(2). Plans submitted and approved under all of these sections become part of the approved permit and are enforceable by the regulatory authority. Thus regulatory authorities are empowered to assure that mining operations proceed in a timely manner and that reclamation be performed contemporaneously.

To the extent that the lack of time and distance requirements may have contributed to problems, under the final rule States are required to have time and distance schedules for all types of mining being permitted within their State. Area and contour mines have national time and distance schedules (Section 816.101(a)(1)&(2)) and other types of mines must have State schedules (Section 816.101(a)(3)).

**b. Enforcement.** OSM regulations at Section 840.11(b) require four complete and 12 partial inspections of all mine sites yearly. Inspectors visiting a mine monthly can readily ascertain whether mining and reclamation is progressing contemporaneously, and whether an operator is following the approved operation and reclamation plans. Thus

enforcement of the permit conditions that an operator must follow should assure that reclamation will occur in a timely manner.

c. Oversight. In accordance with Section 842.11(a)(1), OSM has the authority to conduct inspections of surface coal mining and reclamation operations to monitor and evaluate the administration of the approved State programs.

A commenter to the Notice of Inquiry addressed the issue of additional oversight. Since the commenter believed that the issue of timely reclamation was confined to one State, they recommended that a better course of action appears to be oversight where the problem is allegedly occurring. The commenter can be assured that if additional oversight efforts are indicated by OSM's evaluation of a State's implementation of its program, these efforts will be undertaken.

d. Multiple seam mining. As stated earlier, the final rules provide for the application of time and distance schedules to contour and area mines with more than one seam. States may elect to have a separate schedule for multiple seam mines, which are also area or contour mines, if the State schedule adheres to the limits in Section 816.101(a) (1) or (2) for those mines.

Two commenters stated that the proposed regulations failed to address multiple-seam mining. For a variety of reasons the commenters asked that the final rules include explicit standards for applying time and distance limitations to multiple-seam operations in both contour mining and mountaintop removal operations.

The same commenters contended OSM must provide, as required by the district court in its remand of the regulations governing contemporaneous reclamation, justification for its failure to establish minimum national backfilling and grading standards for multiple seam mining whether in area and contour mines or mountaintop removal operations. The commenters claimed the States, in the absence of Federal standards, will establish the weakest standards possible in order to assist their local industry.

A commenter to the Notice of Inquiry stated that when the proposed rule on time and distance schedules is adopted it will establish standards applicable to all types of mining operations, including multiple seam and mountaintop removal. The commenter continued by making the observation that many of the multiple seam coal mining operations occur within contour or area operations for which specific time and distance requirements are already in place.

As stated earlier, the time and distance schedules for contour and area mines apply whether the mine is a single or multiple seam situations. When these schedules are applied to mines with more than one seam, the time or distance standard will start with the removal of coal within the last seam. Also, if a permit applicant believes that the national schedules for contour and area mines which apply to a particular multiple seam operation are unworkable they have the ability to request a site-specific extension to the time limit under Section 816.101(b).

Commenters to the proposed rules, pointed out a situation where a lower seam is permitted without any intention of mining the seam. The commenters asserted that after mining the next to last seam, the operator applies for inactive status and leaves the mountain with no reclamation.

With regard to the above comment, the time and distance limits apply when the requirement to reclaim begins. Until coal removal occurs at an area, the particular limits in Section 816.101(a) do not apply. However, OSM has rules which govern not only contemporaneous reclamation but also temporary and permanent cessation and bonding all of which may apply to the type of situation described. Operators are required to follow their approved plans of operation. If they do not, the regulatory authority can step in to ensure that the rules are complied with and the violations based upon misrepresentations in such plans are corrected.

e. Mountaintop removal operations. Commenters to the proposed rule stated that OSM must provide justification for its failure to establish minimum national backfilling and grading standards for mountaintop removal operations as required by the district court in its remand or to explain its failure to do so as required by the circuit court.

OSM disagrees with the characterization of the October 1984 district court opinion and the 1988 Circuit court opinion. In their discussion of contemporaneous reclamation, both courts focused on the removal of time and distance limits of area and contour mines. Neither discussion requires the establishment of such standards for mountaintop removal where such standards did not exist previously.

The commenters also maintained that the States would establish the weakest standard possible to help their industry in the absence of Federal standards. They stated that OSM must provide some national minimum standard for mountaintop removal operations so that the Congressional mandate of contemporaneous reclamation is met. In a meeting with OSM, these same commenters claimed that the rules should require State regulatory authorities to establish mountaintop removal requirements which specifically contain standards for contemporaneous reclamation.

The above commenters also acknowledged the difficulty of establishing time or distance limitations for mountaintop removal operations. They said that backfilling and grading operations and the resulting time and distance limitations for these operations will vary depending on whether multiple seams are involved and whether the spoil is being stored on the mountain, or placed entirely in fills. In either case, they concluded, the area would be graded or the surface prepared for revegetation.

Mountaintop removal operations are outside the scope of this rulemaking. However, in response to comments it is noted that the regulatory controls for mountaintop removal operations are based on the premise that the exemption from AOC is the result of an approved, specific post mining land use. The key to timely reclamation therefore is linking the mining and reclamation with the attainment of the post mining land use.

Post mining land use is, of course, evaluated on a site-by-site basis. Land use is determined by the needs of the local area as well as the compatibility of the use with the surrounding environment. Since the mountaintop removal exemption is based on the approved post mining land use and the reclamation is tied to that approval, the reclamation would be coordinated with the development of that land use.

The decision on how to achieve contemporaneous reclamation and how to inspect the permitted site to ensure adherence to timely reclamation is provided for in the 1987 amendment to the permitting requirements for mountaintop removal operations (*52 FR 39182*, October 21, 1987). Section 785.14(c)(1)(iii)(F) requires the applicant for a mountaintop removal permit to attach a schedule to the reclamation plan as to integrate the mining operation and the reclamation with the post mining land use. To approve a permit for mountaintop removal operations a regulatory authority must evaluate that schedule against the general prescriptions covering contemporaneous reclamation in Section 816.100. Following the approval of the permit, the schedule forms the inspectable basis to ensure the operation is being contemporaneously reclaimed.

In summary, mountaintop removal operations are subject to the contemporaneous reclamation standards in Section 816.100. That performance standard is achieved through a site-by-site analysis of the requirements for attaining the post mining land use which formed the basis for the exemption from AOC in the permit. Each permit for mountaintop removal operations must contain a schedule, attached to the reclamation plan, which integrates the mining operation and the reclamation with achieving the post mining land use. Mine sites will be inspected against that schedule to ensure that the site is being contemporaneously reclaimed.

## **H. THIN OR THICK OVERBURDEN**

The final rules for Sections 816.104 and 816.105 remain unchanged from the rules proposed. OSM has reorganized former Sections 816.104 and 816.105 so that paragraph (a) of these sections defines thin overburden and thick overburden, respectively, and paragraph (b) contains the corresponding backfilling and grading performance standards. For convenience, the definitions of thin overburden and thick overburden in Sections 816.104(a) and 816.105(a), respectively, are discussed concurrently under the following subheading. The backfilling and grading performance standards for thin and thick overburden in Section 816.104(b) and Section 816.105(b), respectively, are then discussed under consecutive separate subheadings.

### **1. SECTION 816.104(a) -- DEFINITION OF THIN OVERBURDEN; SECTION 816.105(a) -- DEFINITION OF THICK OVERBURDEN**

In preparing the proposed rule on Sections 816.104(a) and 816.105(a) OSM considered moving the definitions of thin overburden and thick overburden to the definition section in 30 CFR 701.5. However, because of their limited application, OSM decided to not do so. However, the term "spoil", which is used in both definitions, continues to be defined at Section 701.5.

Thin overburden is defined in final Section 816.104(a) as the condition where there is

“insufficient spoil and other waste materials available from the entire permit area to restore the disturbed area to its approximate original contour. Insufficient spoil and other waste materials occur where the overburden thickness times the swell factor, plus the thickness of other available waste materials, is less than the combined thickness of the overburden and coal bed prior to removing the coal, so that after backfilling and grading the surface configuration of the reclaimed area would not: (1) [c]losely resemble the surface configuration of the land prior to mining; or (2) [b]lend into and complement the drainage pattern of the surrounding terrain.”

Final Section 816.105(a) defines thick overburden as

“more than sufficient spoil and other waste materials available from the entire permit area to restore the disturbed area to its approximate original contour. More than sufficient spoil and other waste materials occur where the overburden thickness times the swell factor less the settlement exceeds the combined thickness of the overburden and coal bed prior to removing the coal, so that after backfilling and grading the surface configuration of the reclaimed area would not: (1) [c]losely resemble the surface configuration of the land prior to mining; or (2) [b]lend into and complement the drainage pattern of the surrounding terrain.”

Both definitions contain three standards incorporating the requirements of sections 515(b)(3) and 701(2) of the Act. The first is whether there is sufficient overburden and, in the case of thin overburden, other waste materials, to restore the approximate original contour. The second standard is whether the resulting surface configuration closely resembles the land prior to mining. The third is whether the drainage pattern of the reclaimed area complements the surrounding terrain. OSM has adopted these standards for the reasons discussed below.

The exemptions in section 515(b)(3) of the Act are based on whether there is sufficient overburden to restore the land to AOC. Thin overburden means there is too little material to restore AOC; thick overburden means there is too much. Thus, whether a permit area qualifies for a thick or thin overburden exemption fundamentally depends on the definition of AOC.

Section 701(2) of the Act and the corresponding regulation at 30 CFR 701.5 define AOC as

“that surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area including any terracing or access roads, [1] closely resembles the general surface configuration of the land prior to mining and [2] blends into and complements the drainage pattern of the surrounding terrain, with all highwalls and spoil piles eliminated \* \* \* .”

Under this definition the two principal standards for determining AOC are whether the surface configuration of the reclaimed area would (1) closely resemble the surface configuration of the land prior to mining; and (2) blend into and complement the drainage pattern of the surrounding terrain. In restoring AOC, both of these standards must be met.

The final definitions of "thin overburden" and "thick overburden" incorporate these two standards from the definition of AOC as the measure of whether the spoil and other available waste materials are sufficient to restore AOC. The definitions apply these two standards for AOC in the disjunctive, using the term or, because a failure to meet either standard would prevent the restoration of AOC, and thus establish the occurrence of thin or thick overburden.

As it did in 1983, OSM rejects the precise numerical limits which were included in the 1979 rules as being impractical for evaluating the utility of the overburden and other available waste materials to restore AOC. Defining thin and thick overburden in precise numerical terms is impractical because of the diversity of surface configurations and drainage patterns to which the final rule would apply throughout the coal mining regions of the United States. Depending on the circumstances, inflexible numerical limits might be either too loose or too stringent, and seldom ideal.

OSM's first attempt at defining thick or thin overburden relied solely on the percentage change in overburden volume. In 1977, the proposed initial program rules prescribed thick or thin overburden as existing when the final thickness exceeded 1.2 of the initial thickness for thick overburden and when the final thickness was less than 0.8 of the initial thickness for thin overburden. (42 FR 44931, September 7, 1977). However, as acknowledged in the preamble to that

rule, while OSM was using a numerical value as the standard, the primary purpose of the rules were to ensure that sites met approximate original contour. (42 FR 44921, September 7, 1977).

OSM altered its position in the final initial program rule, acknowledging at that time, that the precise numerical limits were insufficient by themselves. This position is discussed in the preamble to the final initial program rule.

Some concern was expressed over the distinction between thick and thin overburden. In particular, reviewers were concerned that not all operations needed modification of the requirement to achieve AOC. The regulations have been revised to require that whether thin or thick overburden conditions exist operations must achieve AOC whenever possible. (42 FR 62645, Dec. 27, 1977).

The final initial program rule (30 CFR 715.14(f)) added the following sentence to the proposed initial program rule.

The provisions of paragraphs (g) and (h) [performance standards for thick and thin overburden] apply only when operations cannot be carried to comply with the requirements of paragraph (a) of this section to achieve AOC.

The 1979 final permanent regulatory program rules mirrored the final initial regulatory program by using the two pronged test, i.e., greater than 1.2 and achieve AOC or less than 0.8 and achieve AOC. By 1982, OSM recognized that this artificially constructed two pronged test was impractical. The numerical limits were only one part of a complex, site specific determination as to whether or not an operation could achieve AOC. In addition to being only one part of the decision there are situations in which the sites could qualify under the numerical limit but not meet the AOC criteria.

Figures 1 and 2 give examples of where reliance on precise numerical limits to determine whether thin or thick overburden conditions exist would lead to improper regulatory determinations as to whether the disturbed land should be returned to AOC. Figure 1 shows a situation where more than 20% of the premining volume has been lost but AOC can still be obtained. Figure 2 shows a situation where the post mining volume is more than 20% greater than the premining volume but AOC can still be obtained. In these situations an exemption from AOC for thin or thick overburden based on a precise 20% numerical limit would be inappropriate.

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[See Material (Figures 1 and 2) in original]

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Evaluations of post-mining surface configuration and drainage pattern involve subjective professional judgments that must be custom-tailored to approximate the terrain at any given mine. The responsible regulatory authority is best equipped to determine the sufficiency of overburden to restore AOC in its own jurisdiction on a case-by-case basis. For these reasons OSM believes it is preferable to define "thin overburden" and "thick overburden" in a way so as to conform with the standards of the Act, while giving the regulatory authority sufficient discretion to apply these standards in a sound professional manner to the diverse conditions which prevail at individual mines in each particular State.

One commenter supported OSM's deletion of the numerical standards for thin and thick overburden and the rationale that no set of rigid numerical standards could possibly apply to all types of terrain. Another commenter supported OSM's functional approach to defining thin or thick overburden and deleting the numerical limitations of the 1979 regulations. The latter commenter also claimed that section 515(b)(3) of the Act provides all the guidance regulators can be given, and that OSM should adopt that explanation in order to avoid excessive detail in the performance standards.

Another commenter objected to deleting the numerical limitations contained in the 1979 regulations for determining what constitutes thin and thick overburden. This commenter asserted that OSM's proposed rule failed to justify deletion of the 1979 standards because OSM had not presented data showing these standards to be unworkable. The commenter claimed that such data is what the Court of Appeals had in mind in remanding the 1983 regulations on thin and thick overburden.

As discussed earlier, a precise 20% numerical limit calculated from a comparison of pre and post mining volumes is an impractical test for determining the existence of a thin or thick overburden exemption because such a percentage limit

cannot always accommodate the diversity of surface configurations and drainage patterns to which the final rule applies. The appropriateness of a thin or thick exemption from the requirement to return to AOC must instead be evaluated on the ability of available overburden, following backfilling and grading, to return the surface configuration of the reclaimed land to that closely resembling the surface configuration of the land prior to mining and to blend into the drainage patterns of the surrounding terrain.

Another commenter proposed that the thin overburden minimum standards be revised to include overburdens which are "thin" because of the removal of noncoal minerals by other operators prior to coal extraction. The commenter asserted that coal mining operations that follow noncoal mineral removal should not be excluded from the relaxed original contour reclamation requirements available to other surface coal mining operations where the overburden is naturally thin.

OSM's rules do not require the excavation of additional pits for the sole purpose of obtaining material to backfill the original pit. A situation such as described by the commenter should be evaluated under the previously mined area provisions of Section 816.106, since, presumably, the noncoal mining operation would not be a "surface coal mining operation subject to the standards of the Act."

## **2. SECTION 816.104(b) -- THIN OVERBURDEN PERFORMANCE STANDARDS**

Final Section 816.104(b) contains the performance standards that apply where thin overburden, as defined in Section 816.104(a), occurs within the permit area. The section requires the permittee at a minimum to (1) use all spoil and other waste materials available from the entire permit area to attain the lowest practicable grade, but not more than the angle of repose; and (2) meet the general backfilling and grading requirements of 30 CFR 816.102 (a)(2) through (j).

The performance standards in Section 816.104(b) (1) and (2) are identical to those adopted by OSM in 1983 (*48 FR* 23369, May 24, 1983) and are identical to those proposed. They will complement the general backfilling and grading performance standards in Section 816.102. Section 816.104(b)(1) implements the thin overburden exemption found at section 515(b)(3) of the Act, while Section 816.104(b)(2) stipulates that all of the general requirements for backfilling and grading of Section 816.102 are applicable except for Section 816.102(a)(1), which requires the restoration of AOC, and Section 816.102(k), which provides exemptions, including the thin overburden exemption that do not apply. Thus, the only practical difference between the general performance standards in Section 816.102 and those for thin overburden in Section 816.104(b) (1) and (2) is that the latter section establishes priority for the use of limited spoil and waste material in reclamation.

A commenter expressed concern about the requirement to place spoil so as to achieve the lowest practicable grade in Sections 816.104(b) and 816.105(b). The commenter interpreted lowest practicable grade to mean flat and pointed out that flat land may reduce landscape diversity, which reduces wildlife habitat, and may be geomorphically incompatible with upstream and downstream drainage characteristics. The commenter stated that Section 515(b)(3) of the Act has a built-in contradiction (i.e., requires spoil be backfilled to "the lowest practicable grade" in order to achieve "an ecologically sound land use compatible with the surrounding region"). The commenter wanted the regulations to resolve this conflict and require backfilling in a manner compatible with the approved postmining land use and surrounding undisturbed land.

OSM agrees that "flat land" may not resemble the general configuration of the land prior to mining or complement the drainage pattern of the surrounding terrain. Nevertheless, the provisions of Section 816.104(b) and 105(b), as taken from section 515(b)(3) of the Act, require the backfilled area to attain the lowest practicable grade, but not more than the angle of repose. The phrase "lowest practicable grade" does not require flat land. It requires the lowest grade that is compatible with the surrounding terrain. In describing reclamation in a thin overburden situation, Congress indicated that the final regrading of the mine site should resemble the original landscape. H.R. No. 95-218, 95th Cong., 1st Sess. 103 (1977). Thus, the regulations already do what the commenter wishes them to do.

## **3. SECTION 816.105(b) -- THICK OVERBURDEN PERFORMANCE STANDARDS**

Final Section 816.105(b) contains the performance standards that apply where thick overburden, as defined in Section 816.105(a), occurs within the permit area.

Where the reclamation plan indicates the occurrence of thick overburden, Section 816.105(b) requires the permittee at a minimum to (1) restore the approximate original contour and then use the remaining spoil and other waste materials to attain the lowest practicable grade, but not more than the angle of repose; (2) meet the general backfilling and grading requirements of 30 CFR 816.102(a)(2) through (j); and (3) dispose of any excess spoil in accordance with 30 CFR 816.71 through 816.74.

The performance standards in Section 816.105(b)(1) through (3) are identical to those adopted by OSM in 1983 (*48 FR 23369*, May 24, 1983), and as proposed. They complement the general backfilling and grading performance standards in Section 816.102. Section 816.105(b)(1) implements the thick overburden exemption found at section 515(b)(3) of the Act, while Section 816.105(b)(2) provides that all of the general requirements for backfilling and grading of Section 816.102 are applicable. Section 816.105(b)(3) references the former regulations governing the disposal of excess spoil, and ensures that all spoil and other waste materials that would exceed the angle of repose are disposed of in accordance with the requirements of the Act.

The only practicable differences between the general performance standards in Section 816.102 and those for thick overburden in Section 816.105(b) are that under the latter (1) after AOC is restored the permittee may continue to use any remaining spoil and other waste materials to attain the lowest practicable grade, but not more than the angle of repose; and (2) the permittee must dispose of any excess spoil in accordance with Section 816.71 through 816.74.

### **I. SECTIONS 816.133(d) and 817.133(d) - AOC VARIANCES**

Final Section 816.133(d), which is identical to proposed Section 817.133(d), contains criteria for granting a variance from the requirement to restore disturbed areas to their approximate original contour. Included in paragraph (d)(1) is the stipulation that the variance be granted in accordance with Section 785.16, thus limiting such variances to steep slope areas. Final Section 785.16 renders the previous suspension of Section 816.133(d) void, as it was based upon the suspension of former Section 785.16.

A commenter recommended that Section 816.133(d) be further clarified by adding language to limit its application to steep slope mining operations.

OSM disagrees. There is no need for additional language in Section 816.133(d) to clarify that the section is limited in applicability to steep slope mining operations. That fact is indicated by the cross-reference to Section 785.16 found at Section 816.133(d)(1). Surface coal mining operations which qualify for a variance from AOC requirements under this section are obligated to adhere to Section 785.16 which limits variances for steep slope operations.

### **III. PROCEDURAL MATTERS**

#### **A. Effect in Federal Program States and on Indian Lands**

The rule applies through cross-referencing to those States with Federal programs. This includes California, Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, and Washington. The Federal programs for these States appear at 30 CFR parts 905, 910, 912, 921, 922, 933, 937, 939, 941, 942, and 947, respectively. The rule also applies, through cross-referencing, to Indian lands under the Federal program for Indian lands as provided in 30 CFR part 750.

#### **B. Effect on State Programs**

Following promulgation of this final rule, OSM will evaluate permanent State regulatory programs approved under section 503 of the Act to determine whether any changes in these programs will be necessary. If the Director determines that certain State program provisions should be amended in order to be made no less effective than the revised Federal rules, the individual States will be notified in accordance with the provisions of 30 CFR 732.17.

#### **C. Federal Paperwork Reduction Act**

This rule does not contain collections of information which require approval by the Office of Management and Budget under *44 U.S.C. 3501* et seq.

#### D. Executive Order 12291 and Regulatory Flexibility Act

The Department of the Interior has determined that the proposed rule is not a major rule under the criteria of Executive Order 12291 (February 17, 1981), and certifies that it will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (*5 U.S.C. 601 et seq.*). The rule would affect a relatively small number of surface coal mining operations. The rule does not distinguish between small and large entities. The economic effects of the proposed rule are estimated to be minor, and no incremental economic effects are anticipated as a result of the rule.

#### E. National Environmental Policy Act

OSM has prepared environmental assessments and has made a finding that the final rules will not significantly affect the quality of the human environment under section 102(2)(C) of the National Environmental Policy Act of 1969, *42 U.S.C. 4332(2)(C)*. The environmental assessments are on file in the OSM Administrative Record, room 5131, 1100 L Street, NW., Washington, DC.

#### F. Agency Approval

Section 516(a) requires that, with regard to rules directed toward the surface effects of underground mining, OSM must obtain written concurrence from the head of the department which administers the Federal Mine Safety and Health Act of 1977, the successor to the Federal Coal Mine Health and Safety Act of 1969. OSM has obtained the written concurrence of the Assistance Secretary for Mine Safety and Health, U.S. Department of Labor.

#### G. Author

The final author of this rule is Mr. Dennis M. Hunter, Jr., Chief, Research and Technical Standards Branch, Office of Surface Mining Reclamation and Enforcement.

### **LIST OF SUBJECTS**

#### 30 CFR Part 761

Historic preservation, National forests, National parks, National trails system, National wild and scenic rivers system, Surface mining, Underground mining, Wilderness areas, Wildlife refuges.

#### 30 CFR Part 780

Reporting and recordkeeping requirements, Surface mining.

#### 30 CFR Part 784

Reporting and recordkeeping requirements, Underground mining.

#### 30 CFR Part 785

Reporting and recordkeeping requirements, Surface mining, Underground mining.

#### 30 CFR Part 816

Environmental protection, Reporting and recordkeeping requirements, Surface mining.

#### 30 CFR Part 817

Environmental protection, Reporting and recordkeeping requirements, Underground mining.

Accordingly, 30 CFR Parts 761, 780, 784, 785, 816 and 817 are amended as set forth below:

Dated: October 21, 1991.

David O'Neal, Assistant Secretary -- Land and Minerals Management.

### **PART 761 -- AREAS DESIGNATED BY ACT OF CONGRESS**

1. The authority citation for part 761 continues to read as follows:

Authority: *30 U.S.C. 1201 et seq.*

### **SECTION 761.5 [Amended]**

2. Section 761.5 is amended by removing from the definition of Significant recreational, timber, economic, or other values incompatible with surface coal mining operations the phrase "beyond an operator's ability to repair or restore."

### **PART 780 -- SURFACE MINING PERMIT APPLICATIONS -- MINIMUM REQUIREMENT FOR RECLAMATION AND OPERATION PLAN**

3. The authority citation for part 780 continues to read as follows:

Authority: Pub. L. 95-87, *30 U.S.C. 1201* et seq., as amended; Section 115 of Pub. L. 98-146, *30 U.S.C. 1257; 16 U.S.C. 470* et seq.; and Pub. L. 100-34.

### **SECTION 780.14 [Amended]**

4. Section 780.14 paragraph (c) is amended by adding a comma and the citation "816.74(c)" after the citation "816.73(c)" in the first sentence.

### **SECTION 780.35 [Amended]**

5. Section 780.35 paragraph (b) introductory text is amended by adding the words "except for the disposal of excess spoil on pre existing benches," to the beginning of the sentence.

### **PART 784 -- UNDERGROUND MINING PERMIT APPLICATIONS -- MINIMUM REQUIREMENTS FOR RECLAMATION AND OPERATION PLAN**

6. The authority citation for part 784 continues to read as follows:

Authority: Pub. L. 95-87, *30 U.S.C. 1201* et seq., as amended; Section 115 of Pub. L. 98-146, *30 U.S.C. 1257; 16 U.S.C. 470* et seq.; and Pub. L. 100-34.

### **SECTION 784.23 [Amended]**

7. Section 784.23 paragraph (c) is amended by adding a comma and the term "817.74(c)" after the term "817.73(c)" in the first sentence.

### **PART 785 -- REQUIREMENTS FOR PERMITS FOR SPECIAL CATEGORIES OF MINING**

8. the authority citation for part 785 is revised to read as follows:

Authority: *30 U.S.C. 1201* et seq., as amended, and Pub. L. 100-34.

### **SECTION 785.16 [Amended]**

9. The suspension of Section 785.16, published in the Federal Register of November 20, 1986 (*51 FR 41961*), is removed effective January 16, 1992.

10. Section 785.16 is amended by revising the heading and the first sentence of paragraph (a) to read as follows:

**SECTION 785.16 - PERMITS INCORPORATING VARIANCES FROM APPROXIMATE ORIGINAL CONTOUR RESTORATION REQUIREMENTS FOR STEEP SLOPE MINING.**

(a) The regulatory authority may issue a permit for non-mountaintop removal, steep slope, surface coal mining and reclamation operations which includes a variance from the requirements to restore the disturbed areas to their approximate original contour that are contained in Sections 816.102, 816.104, 816.105, and 816.107, or 817.102 and 817.107 of this chapter. \* \* \*

\* \* \* \* \*

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

11. The authority citation for part 816 continues to read as follows:

Authority: Pub. L. 95-87 (*30 U.S.C. 1201 et seq.*), and Pub. L. 100-34, unless otherwise noted.

**SECTION 816.74 [Amended]**

12. Section 816.74 is amended by redesignating paragraph (e) as paragraph (h); by adding paragraphs (e), (f) and (g); and by revising paragraphs (a), (b), (c), and (d), to read as follows:

**SECTION 816.74 - DISPOSAL OF EXCESS SPOIL: PREEXISTING BENCHES.**

(a) The regulatory authority may approve the disposal of excess spoil through placement on a preexisting bench if the affected portion of the preexisting bench is permitted and the standards set forth in Sections 816.102(c), (e) through (h), and (j), and the requirements of this section are met.

(b) All vegetation and organic materials shall be removed from the affected portion of the preexisting bench prior to placement of the excess spoil. Any available topsoil on the bench shall be removed, stored and redistributed in accordance with Section 816.22 of this part. Substitute or supplemental materials may be used in accordance with Section 816.22(b) of this part.

(c) The fill shall be designed and constructed using current, prudent engineering practices. The design will be certified by a registered professional engineer. The spoil shall be placed on the solid portion of the bench in a controlled manner and concurrently compacted as necessary to attain a long term static safety factor of 1.3 for all portions of the fill. Any spoil deposited on any fill portion of the bench will be treated as excess spoil fill under Section 816.71.

(d) The preexisting bench shall be backfilled and graded to --

(1) Achieve the most moderate slope possible which does not exceed the angle of repose;

(2) Eliminate the highwall to the maximum extent technically practical;

(3) Minimize erosion and water pollution both on and off the site; and

(4) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the fill design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the fill, and ensure stability.

(e) All disturbed areas, including diversion channels that are not ripped or otherwise protected, shall be revegetated upon completion of construction.

(f) Permanent impoundments may not be constructed on preexisting benches backfilled with excess spoil under this regulation.

(g) Final configuration of the backfill must be compatible with the natural drainage patterns and the surrounding area, and support the approved postmining land use.

\* \* \* \* \*

13. Section 816.81 is amended by revising the introductory text of paragraph (a) to read as follows:

**SECTION 816.81 - COAL MINE WASTE: GENERAL REQUIREMENTS.**

(a) General. All coal mine waste disposed of in an area other than the mine workings or excavations shall be placed in new or existing disposal areas within a permit area, which are approved by the regulatory authority for this purpose. Coal mine waste shall be hauled or conveyed and placed for final placement in a controlled manner to --

\* \* \* \* \*

14. Section 816.89 is amended by removing paragraph (d).

15. Section 816.100 is amended by removing the last sentence.

16. Section 816.101 is added to read as follows:

**SECTION 816.101 - BACKFILLING AND GRADING: TIME AND DISTANCE REQUIREMENTS.**

(a) Except as provided in paragraph (b) of this section, rough backfilling and grading for surface mining activities shall be completed according to one of the following schedules:

- (1) Contour mining. Within 60 days or 1,500 linear feet following coal removal;
- (2) Area mining. Within 180 days following coal removal, and not more than four spoil ridges behind the pit being worked, the spoil from the active pit constituting the first ridge; or
- (3) Other surface mining methods. In accordance with the schedule established by the regulatory authority. For States with approved State programs, schedules are subject to the State program approval process.

(b) The regulatory authority may extend the time allowed for rough backfilling and grading for the entire permit area or for a specified portion of the permit area if the permittee demonstrates in accordance with Section 780.18(b)(3) of this chapter that additional time is necessary.

17. Section 816.104 is revised to read as follows:

**SECTION 816.104 - BACKFILLING AND GRADING: THIN OVERBURDEN.**

(a) Definition. Thin overburden means insufficient spoil and other waste materials available from the entire permit area to restore the disturbed area to its approximate original contour. Insufficient spoil and other waste materials occur where the overburden thickness times the swell factor, plus the thickness of other available waste materials, is less than the combined thickness of the overburden and coal bed prior to removing the coal, so that after backfilling and grading the surface configuration of the reclaimed area would not:

- (1) Closely resemble the surface configuration of the land prior to mining; or
- (2) Blend into and complement the drainage pattern of the surrounding terrain.

(b) Performance standards. Where thin overburden occurs within the permit area, the permittee at a minimum shall:

- (1) Use all spoil and other waste materials available from the entire permit area to attain the lowest practicable grade, but not more than the angle of repose; and

(2) Meet the requirements of Sections 816.102(a)(2) through (j) of this part.

18. Section 816.105 is revised to read as follows:

**SECTION 816.105 - BACKFILLING AND GRADING: THICK OVERBURDEN.**

(a) Definition. Thick overburden means more than sufficient spoil and other waste materials available from the entire permit area to restore the disturbed area to its approximate original contour. More than sufficient spoil and other waste materials occur where the overburden thickness times the swell factor exceeds the combined thickness of the overburden and coal bed prior to removing the coal, so that after backfilling and grading the surface configuration of the reclaimed area would not:

- (1) Closely resemble the surface configuration of the land prior to mining; or
- (2) Blend into and complement the drainage pattern of the surrounding terrain.

(b) Performance standards. Where thick overburden occurs within the permit area, the permittee at a minimum shall:

- (1) Restore the approximate original contour and then use the remaining spoil and other waste materials to attain the lowest practicable grade, but not more than the angle of repose;
- (2) Meet the requirements of Sections 816. 102(a)(2) through (j) of this part; and
- (3) Dispose of any excess spoil in accordance with Sections 816.71 through 816.74 of this part.

**SECTION 816.133 [Amended]**

19. In Section 816.133, the suspension of paragraph (d) is removed.

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

20. The authority citation for part 817 continues to read as follows:

Authority: Pub. L. 95-87 (*30 U.S.C. 1201 et seq.*), and Pub. L. 100-34, unless otherwise noted.

**SECTION 817.74 [Amended]**

21. Section 817.74 is amended by redesignating paragraph (e) as paragraph (h); by adding paragraphs (e), (f) and (g); and by revising paragraphs (a), (b), (c), and (d), to read as follows:

**SECTION 817.74 - DISPOSAL OF EXCESS SPOIL: PREEXISTING BENCHES.**

(a) The regulatory authority may approve the disposal of excess spoil through placement on a preexisting bench if the affected portion of the preexisting bench is permitted and the standards set forth in Section 817.102 (c), (e) through (h), and (j), and the requirements of this section are met.

(b) All vegetation and organic materials shall be removed from the affected portion of the preexisting bench prior to placement of the excess spoil. Any available topsoil on the bench shall be removed, stored and redistributed in accordance with Section 817.22 of this part. Substitute or supplemental materials may be used in accordance with Section 817.22(b) of this part.

(c) The fill shall be designed and constructed using current, prudent engineering practices. The design will be certified by a registered professional engineer. The spoil shall be placed on the solid portion of the bench in a controlled manner and concurrently compacted as necessary to attain a long term static safety factor of 1.3 for all portions of the fill. Any spoil deposited on any fill portion of the bench will be treated as excess spoil fill under Section 817.71.

(d) The preexisting bench shall be backfilled and graded to --

- (1) Achieve the most moderate slope possible which does not exceed the angle of repose;
- (2) Eliminate the highwall to the maximum extent technically practical;
- (3) Minimize erosion and water pollution both on and off the site; and

(4) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the fill design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the fill, and ensure stability.

(e) All disturbed areas, including diversion channels that are not riprappd or otherwise protected, shall be revegetated upon completion of construction.

(f) Permanent impoundments may not be constructed on preexisting benches backfilled with excess spoil under this regulation.

(g) Final configuration of the backfill must be compatible with the natural drainage patterns and the surrounding area, and support the approved postmining land use.

\* \* \* \* \*

22. Section 817.81 is amended by revising the introductory text of paragraph (a) to read as follows:

**SECTION 817.81 - COAL MINE WASTE: GENERAL REQUIREMENTS.**

(a) General. All coal mine waste disposed of in an area other than the mine workings or excavations shall be placed in new or existing disposal areas within a permit area, which are approved by the regulatory authority for this purpose. Coal mine waste shall be hauled or conveyed and placed for final placement in a controlled manner to --

\* \* \* \* \*

23. Section 817.89 is amended by removing paragraph (d).

24. In Section 817.133, the suspension of paragraph (d) is removed.