

FEDERAL REGISTER: 53 FR 34635 (September 7, 1988)

DEPARTMENT OF THE INTERIOR

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

30 CFR Parts 816 and 817

Surface Coal Mining and Reclamation Operations; Permanent Regulatory Program; Revegetation

ACTION: Final rule.

SUMMARY: The Office of Surface Mining Reclamation and Enforcement (OSMRE) of the Department of the Interior (DOI) is adopting final rules amending its revegetation regulations for the replanting of trees, the time period for measuring revegetation success, and the approval of normal husbandry practices and minimum stocking and planting arrangements. This action is necessary because the previous rules were found in Federal district court to have been promulgated without sufficient supporting evidence in the record. These changes will allow surface mining regulatory authorities to obtain approval for normal husbandry practices that may occur without restarting the operator's period of responsibility and will require the approval of State forestry and wildlife agencies for minimum stocking and planting arrangements. This action will allow certain trees planted during the responsibility period to be counted in the measurement of revegetation success and will base the determination of whether revegetation has been achieved on any two years, except the first year, of the responsibility period where the postmining land use is grazing land, pasture land or cropland.

EFFECTIVE DATE: October 7, 1988.

FOR FURTHER INFORMATION CONTACT: Patrick W. Boyd, Branch of Federal and Indian Programs, OSMRE, 1951 Constitution Avenue NW., Washington, DC 20240; Telephone (202) 343-1864 (FTS or commercial).

SUPPLEMENTARY INFORMATION:

- I. Background.
- II. Discussion of rules adopted and responses to comments.
- III. Procedural matters.

I. BACKGROUND

On July 27, 1987, OSMRE published a notice of proposed rulemaking to amend 30 CFR Parts 816 and 817 relating to the standards for success in establishing postmining vegetation (*52 FR 28012*). Public hearings were scheduled for September 28, 1987, in Washington, DC; October 5, 1987, in Denver, CO; and October 12, 1987, in Pittsburgh, PA. Since no one requested to testify at these hearings, none were held. The comment period closed on October 5, 1987. On October 6, 1987, the comment period was reopened and extended through October 21, 1987, to allow additional time for interested parties to submit comments. During these periods OSMRE received comments from 21 commenters representing Federal and State agencies, coal companies, trade associations and conservation groups.

The provisions of Title V of the Surface Mining Control and Reclamation Act of 1977 (SMCRA), *30 U.S.C. 1201 et seq.*, that are relevant to this rulemaking are found in sections 501, 509, 515(b) (19) and (20), 516(a)-(d) and 519. These sections set forth the basis for criteria for establishment of postmining vegetation, as well as the period of operator responsibility. Specifically, the surface mining operator is required to assume responsibility for the success of revegetation for either five or ten full years after the last year of augmented seeding, fertilizing, irrigation or other work to assure a vegetative cover at least equal to the natural vegetation of the area. SMCRA has been construed to allow the Secretary to apply the extended periods of responsibility to operators of underground mines, as well as to operators of surface mines. The five-year period of responsibility applies to areas or regions receiving an annual average precipitation greater than 26 inches, and the ten-year period is applicable to areas or regions where the annual average precipitation is 26 inches or less.

On March 13, 1979, OSMRE published regulations implementing the permanent regulatory program required by SMCRA (*44 FR 14902*). The regulations were challenged in lawsuits brought by representatives of two States, the coal industry and citizen and environmental groups. These lawsuits were consolidated and heard by the U.S. District Court for

the District of Columbia. See *In Re: Permanent Surface Mining Regulation Litigation*, No. 79-1144 (D.D.C. 1980). The coal industry contended that the provision that delayed starting a coal operator's responsibility for successful revegetation until the planted vegetation reached 90 percent of the natural cover lacked support in SMCRA or the legislative history. The district court agreed in a decision issued on February 26, 1980, and remanded the rule. In response to the district court ruling, OSMRE suspended the regulations insofar as they extended the period of responsibility for revegetation from the point at which the operators meet the revegetation standards of section 515(b)(19) of SMCRA. This action allowed States to permit the period of liability to begin after the last year in which the operator had completed augmented seeding, fertilizing, and irrigation or other work. The suspension notice also specified that the period of liability shall begin again wherever augmented seeding, fertilization, irrigation or other work is required or conducted on the site prior to bond release (*45 FR 51549*, August 4, 1980).

OSMRE published new regulations at 30 CFR 816.116(c) and 817.116(c) (*48 FR 40140*) on September 2, 1983. These regulations provided for regulatory authority approval of "selective husbandry practices." These approved practices were allowed to occur during the liability period without restarting the five- or ten-year period of responsibility for successful revegetation provided the practice was a "normal conservation practice" and was not augmented seeding, fertilizing, irrigation, or other work. The preamble to these regulations stated that under certain conditions the repair of rills and gullies, including reseeding or transplanting necessitated by such repair, can occur without extending the minimum period of responsibility for revegetation success. The preamble to those regulations should be consulted for additional background information.

A related provision at Section 816.116(b)(3)(ii) set minimum conditions that allowed selective planting/replanting of trees and shrubs during the minimum responsibility period. This planting or replanting could occur without restarting the responsibility period when the planting or replanting was approved as a normal husbandry practice under Section 816.116(c)(4). Furthermore, OSMRE's regulations at Section 816.116(c)(2) provided that for areas that receive more than 26 inches annual average precipitation, proof of revegetation success could be based on the results achieved during the growing season of the last year of the responsibility period.

Citizen and environmental groups, as well as State and industry representatives, again challenged parts of these new regulations in *In Re: Permanent Surface Mining Regulation Litigation (II)*, No. 79-1144 (D.D.C. 1984) (hereafter *In Re: Permanent (II)*). The plaintiff citizen and environmental groups contended that certain provisions ran counter to the requirements of sections 515(b) (19) and (20) of SMCRA. The challengers argued that the repair of rills and gullies is not a normal conservation practice; that the rules do not sufficiently assure that the planting of trees during the period of responsibility is a normal husbandry practice rather than an augmentative practice prohibited by SMCRA; and that it is impossible to determine whether self-generation and plant succession have been achieved if success levels are met only for the last year of the responsibility period. On July 15, 1985, the court remanded the challenged provisions of the regulations because the lack of supporting evidence in the record precluded a determination that the regulations support the goals set forth in SMCRA.

Pursuant to the July 15, 1985, decision, OSMRE published on November 20, 1986, a suspension notice for those portions of the revegetation regulations remanded by the court (*51 FR 41952*). OSMRE suspended the rules concerning the repair of rills and gullies insofar as they allow the repair of rills and gullies to occur without restarting the period of responsibility for the areas of repair. OSMRE suspended the rules concerning the replanting of trees to the extent that they authorize the inclusion of trees and shrubs which have been in place less than the full period of responsibility in determining the success of stocking. Thus, OSMRE would not approve the determination of reclamation success or authorize bond release on the basis of trees or shrubs in place less than the applicable period of liability. OSMRE suspended the rules concerning the period for measuring revegetation success to the extent that they allow the determination of revegetation success to be measured over less than the growing seasons of the last two years of the responsibility period in areas with an average of 26 inches or more of precipitation per year.

The rule changes adopted today address success standards for areas disturbed by surface mining activities, Section 816.116, and areas disturbed by underground mining activities, Section 817.116. The final revegetation rules are identical for surface and underground mining activities. Accordingly, in this preamble Section 816.116 will be discussed with the understanding that the discussion also applies to Section 817.116. The rule changes respond to the court's order in *In Re: Permanent (II)* relating to the repair of rills and gullies (Section 816.116(c)(4)), the replanting of trees (Section 816.116(b)(3)(ii)) as normal husbandry practices during the operator's period of responsibility, and the period of time required for measuring revegetation success for areas receiving more than 26 inches annual average precipitation

(Section 816.116(c)(2)). In addition to the amendments to the revegetation regulations remanded by the court, OSMRE is adopting an amendment to Section 816.116(b)(3)(i) that was considered by the citizen plaintiffs in *In Re: Permanent* (II) to be essential to assure that tree planting during the period of responsibility is not an augmentative practice.

In preparing the final rules and the responses to commenters, OSMRE has relied upon SMCRA, the legislative history of SMCRA, judicial rulings, technical literature and regulatory operating experience.

II. DISCUSSION OF RULES ADOPTED AND RESPONSES TO COMMENTS

SECTIONS 816.116(b)(3)(i) and 817.116(b)(3)(i) - APPROVAL OF SUCCESS STANDARDS

For areas where the postmining land use will be fish and wildlife habitat, recreation, shelterbelts or forest products, the proposed Section 816.116(b)(3)(i) required minimum stocking and planting arrangements to be specified by the regulatory authority on the basis of local and regional conditions and after consultation with, and approval by, the State agencies responsible for the administration of forestry and wildlife programs. The final rule is unchanged from the proposal except for one clarifying modification discussed below.

Several commenters supported retention of the consultation requirement only, as opposed to both consultation and approval. They contended that the approval requirement would dilute the program responsibility of the State regulatory authority, would create overlapping jurisdiction over the regulatory program and would amount to a delegation that would eliminate the regulatory authority's responsibility for final decisions on program-related matters.

OSMRE disagrees that requiring State regulatory authorities to obtain the approval of State forestry and wildlife agencies for minimum stocking and planting arrangements will undermine the authority or diminish the responsibility of the regulatory authority. The approval requirement recognizes that these State agencies are authoritative sources of forestry and wildlife management information that should be relied upon by State regulatory authorities. The requirement for obtaining State forestry and wildlife agency approval of the success standards for land uses that necessitate tree and shrub plantings should assure that only the husbandry practices normally undertaken in the region for the postmining land use occur without restarting the period of liability. The rule provides the regulatory authorities with the flexibility to set specific allowable practices. This is in keeping with the Act, wherein program responsibility rests with the regulatory authorities.

Another commenter suggested that OSMRE specify that the approval should be obtained on a program wide basis to avoid the delays and increased workload that would be associated with having to obtain approval on a permit-by-permit basis. OSMRE acknowledges that the proposal was not clear on this point and agrees that the rule should authorize the approval of State forestry and wildlife agencies for minimum stocking and planting arrangements be obtained either on a program wide or a permit-specific basis. It is not required that the resource agencies approve the proposed stocking and planting arrangements contained in each permit application as long as the permit requirements for stocking and planting meet the minimum program wide requirements. The final rule language has been modified to state that program wide approval is allowed.

One commenter urged that the final rule specifically mention the role of Federal land-managing agencies in approving minimum stocking and planting arrangements on Federal land. The commenter suggested that such specific mention would help to avoid conflict between Federal agencies and State regulatory authorities. OSMRE did not accept this comment. The current Federal lands regulations (30 CFR 740.13(c)(5)) require the regulatory authority to consult with the Federal land management agency and include any comments in the record of the permit decision. This requirement in the Federal lands rules is believed to be adequate to allow Federal land management agencies a voice in determining stocking levels and planting arrangements on Federal lands.

SECTIONS 816.116(b)(3)(ii) and 817.116(b)(3)(ii) - REPLANTING OF TREES

The proposed rule reinstated the remanded requirement that trees and shrubs used in determining the success of stocking and the adequacy of the planting arrangements be healthy, have utility for the approved postmining land use and be in place for at least two growing seasons. The proposal also specified that at least 80 percent of the trees and shrubs used to determine success shall have been in place for 60 percent of the applicable period of responsibility (the 80/60 rule). The final rule adopted today does not differ from the proposal.

One commenter suggested that the word "healthy" be dropped since there is no definition provided in the rules. The commenter suggested that there could be difficulty in establishing what is a healthy tree. OSMRE did not accept the suggested deletion since to do so could give the impression that unhealthy, sickly or badly damaged trees could be counted in measuring revegetation success. Obviously, trees that are not healthy, i.e., characterized to a significant degree by dieback of growing tips, abnormal leaf or needle drop, necrosis, severe mechanical damage to stems or branches, abnormal yellowing or other discoloration of green parts, presence of disease organisms, stunted growth, etc., should not be counted. However, OSMRE recognizes that there are varying degrees of health and notes that State regulatory authorities, in consultation with State forestry agencies, may find it appropriate to establish guidelines for distinguishing healthy trees and shrubs from unhealthy ones. Such guidelines must be based on local and regional conditions. OSMRE does not believe that a definition of the term "healthy" in this context is necessary in the Federal rules.

One commenter suggested that the criterion that trees and shrubs must have been in place at least two growing seasons to be counted seems irrelevant in light of the 80/60 rule. The commenter apparently assumed that the proposed rule would have prohibited an operator from counting a tree or shrub if it had been in place less than 60 percent of the responsibility period. Another commenter opposed the minimum-of-two-years-in-place standard on the basis of research that the commenter believed suggest a two-year establishment period is inadequate. This commenter recommended that the final rule require trees or shrubs to have been in place for three or more years to be counted, particularly in Western States. OSMRE did not accept these comments. The two-year requirement will be applicable at most to only 20 percent of the trees used to determine the success of stocking. The 80/60 rule requires a minimum of 80 percent to be in place for a longer time, either three or six years depending on annual average precipitation. OSMRE disagrees that the two-years-in-place criterion is irrelevant or inadequate. Allowing an operator to include in the number of trees used to determine success some trees (up to 20 percent of the success standard) in place less than 60 percent of the responsibility period, but more than two years, encourages selective replanting of trees to ensure full stocking without significantly weakening the basic requirement that reforestation success be based on the survival of the majority of the trees in the initial planting.

One commenter questioned why the preamble to the proposed rule contained the statement, "Under this proposed rule, the initial planting must occur prior to the start of the responsibility period" (52 FR 28015). In the opinion of the commenter, the statement may be counterproductive to reclamation by precluding an operator from establishing a ground cover to stabilize the site and then re-entering to plant trees within the period of responsibility. The commenter also indicated that, "As long as viable trees and/or shrubs are in place prior to the start of the 60 percent period, timing for their establishment should not penalize an operator or be a factor in determining success." Another commenter recommended that the regulation, not just the preamble, should state that the initial planting of trees or shrubs must occur prior to the start of the liability period. OSMRE did not accept either of these two comments. First, section 515(b)(20) of SMCRA requires the operator to assume responsibility for successful revegetation for five (or ten in drier areas) years after the last year of augmented seeding, fertilization, irrigation or other work necessary to establish the vegetative cover. OSMRE considers the initial planting of trees and shrubs, as well as planting that is in addition to normal husbandry practices, to be augmentative work. Thus, the period of responsibility must start after the initial tree or shrub planting, even if the operator plants a stabilizing ground cover prior to re-entering the site to plant trees. Second, Section 816.116(c)(1) of the permanent program rules contains the requirement that the period of responsibility shall begin after the last year in which augmentative work was performed. Thus, it is not necessary to repeat the requirement.

Two commenters suggested that the difficulty in accurately determining how long a woody plant has been in place on reclaimed land renders the 80/60 rule impractical to implement. OSMRE disagrees because the age of plantations or naturally regenerated stands can be established through photographic documentation, by tagging or marking with paint, by inspection reports, by preservation of sales receipts from nurseries and by other means. State regulatory authorities have the flexibility under the final rule to establish guidelines and procedures governing age determinations and necessary documentation that are appropriate to regional and local conditions.

One commenter opposed the change in the time-in-place standard from eight to six years for areas where the minimum responsibility period is ten years based on climatic conditions in his State. Based on the literature cited in the preamble to the proposed rule, OSMRE believes that six years generally provides an adequate period of time to establish trees on a site in areas where the annual average precipitation is less than 26 inches. As stated in the proposed rule preamble, the

re-asserted here, States are free to impose more stringent requirements if appropriate based on local conditions. Therefore, OSMRE did not change the proposal in response to this comment.

One commenter urged re-evaluation of the 80/60 rule because of a belief that the rule requires even-aged stands on reclaimed areas, which the commenter believed "discourages natural succession processes and leads to increased potential for catastrophic community failure in the event of disease, infestation, fire or other event." OSMRE did not accept the commenter's suggestion because the issue is addressed in other portions of the revegetation rules. For example, the requirement in Section 816.116(b)(3)(i) that minimum stocking and planting arrangements shall be specified on the basis of local and regional conditions will take into account factors such as species diversity and disease control. Section 816.111 requires an evaluation by the regulatory authority of species diversity, regenerative capacity and seasonal characteristics of growth. Finally, Section 816.116(c)(4) allows disease, pest and vermin control measures without restarting the operator's period of responsibility.

Concerning the 80/60 rule, one commenter asserted that neither consideration of 80 percent of trees as sufficient to demonstrate revegetation success nor the deviation from the 90 percent standard of Section 816.116(a)(2) were supported by the cited literature. Based on the literature used to develop the rules, OSMRE believes that reforestation normally requires a continuing effort beyond the initial planting. Seven of the commenters specifically stated that they shared this belief based on their experience with reforestation and/or their familiarity with the literature. The final rule represents a reasonable compromise that will allow some replanting if approved as a normal husbandry practice under Section 816.116(c)(4). Eighty percent of the stock used in determining success is required to be in place for 60 percent of the responsibility period (three or six years depending on average annual precipitation). The remaining stock used in determining success is required to be in place for at least the last two years. Thus, the rule will, in effect, limit replanting to a maximum of 20 percent of the required stocking before restarting the responsibility period.

Section 816.116(a)(2) provides that ground cover, production or stocking shall be considered equal to the approved success standard when they are not less than 90 percent of the success standard. As a point of clarification, OSMRE intends that the 90 percent standard of Section 816.116(a)(2) be applied separately to the group of trees or shrubs that meet the 80 percent criteria and the group meeting the 20 percent criteria. An example should help to illustrate how the 80/60 rule will be applied and how it will interact with the 90 percent standard. If the bond release stocking standard is 1000 trees per acre, under Section 816.116(a)(2) the operator could meet the standard with as few as 900 trees. However, the minimum required 900 trees must be comprised of no fewer than 80 percent (or 720 trees) that have been in place for 60 percent of the responsibility period and no more than 20 percent (or 180 trees) that only meet the two-years-in-place standard. Trees meeting only the two-years-in-place standard cannot be substituted for those meeting the 60-percent-of-the-responsibility-period standard.

The commenter also felt that OSMRE offered no support for either the 60 percent figure or the reduction from eight to six years in the amount of time 80 percent of the trees or shrubs must have been in place in areas of less than 26 inches annual average precipitation. As explained in the preamble to the proposed rule, the 60 percent figure is used with both the five- and ten-year minimum responsibility periods primarily for the sake of simplicity and consistency. Additionally, based on the literature cited, three and six years are adequate to establish stands of trees or shrubs, either planted or naturally regenerated. States are free to impose more stringent requirements, if they choose, based on regional or local conditions.

The commenter suggested that OSMRE could develop a national standard for allowance of minimal replanting during the responsibility period and argued that a ten percent replanting effort during the liability period would allow for reasonable efforts to promote successful revegetation. OSMRE believes that the commenter is in basic agreement that some level of replanting should be allowed under the rules without restarting the responsibility period. Again, OSMRE takes the position that final Section 816.116(b)(3)(ii) allows sufficient replanting to encourage normal husbandry practices without allowing a level of replanting that would clearly be a prohibited augmentative practice.

The commenter further argued that OSMRE provided no justification in the proposed rule for failing to distinguish between commercial and noncommercial forestry and failed to provide minimum standards for determining success on commercial forest land. In 1983, OSMRE deleted from the revegetation rules the specific revegetation success standards for forestry postmining land uses. At that time, OSMRE stated that a minimum stocking level is not necessary to be established in the Federal rules, but that States may find it appropriate to set minimum stocking levels in their programs, provided the minimum stocking levels set by the States are determined on the basis of regional or local conditions and are

no lower than would be expected or is commonly found on similar unmined lands in the area. OSMRE further stated that it is not necessary to make a distinction in the Federal rules between commercial and noncommercial forest land, but that the States may find such a distinction advantageous when setting stocking standards (*48 FR 40153*). Since that time, OSMRE has found that the States have indeed established their own stocking standards based on local conditions and practices. In some cases, such as in West Virginia and Kentucky, the State has simply retained the commercial forestry stocking standards formerly contained in the Federal rules and developed additional standards for wildlife and recreation postmining land uses. This supports OSMRE's position that the States are both capable and willing to establish specific revegetation success standards for postmining and land uses involving trees and shrubs.

SECTIONS 816.116(c)(2) and 817.116(c)(2) - PERIOD FOR MEASURING REVEGETATION SUCCESS

Proposed Section 816.116(c)(2) required the period of responsibility to continue for a minimum of five years where the annual average precipitation is more than 26 inches. Vegetative parameters identified in current Section 816.116(b) for grazing land, pasture land and cropland would, under the proposal, have to equal or exceed the approved success standard during the growing seasons of the last two years of the responsibility period. Revegetation rates on areas approved for the other uses identified in Section 816.116(b) would be required to equal or exceed the success standard during the growing season of the last year of the responsibility period.

The final rule differs from the proposal in that the final rule requires the vegetative parameters for grazing land, pasture land and cropland to equal or exceed the approved success standard during the growing seasons of any two years of the responsibility period, except the first year, while the proposal would have required successful productivity in the last two years of the responsibility period.

Five commenters urged that the final rule require that the applicable success standards for grazing land, pasture land and cropland be met only in the last year of the responsibility period, or last two years if required by the regulatory authority, which would be a reinstatement of the remanded rule. They argued that there is adequate justification for a one-year measurement period and that the previous rule was remanded for lack of support in the record, not because it was inconsistent with SMCRA or incapable of being justified. One commenter suggested that the current farm program rules for determining acreage yield could be used as model for measuring revegetation success. According to the commenter, these rules use an average of several, not necessarily consecutive, years, often including the latest year, to determine crop yield without penalizing the farmer for poor growing seasons. Three commenters advocated use of the results of a minimum of two growing seasons to determine revegetation success. One commenter felt that the final rule should specify minimum levels of revegetation that may be strengthened when necessary to address special situations.

OSMRE is retaining the requirement that revegetation success for postmining land uses involving grazing land, pasture land and cropland be measured over at least two growing seasons. The two-year measurement period increases the reliability of the overall measurement by decreasing the likelihood that success will be based on the results of an atypical growing season (for cropland). OSMRE did not accept the comment that the method for determining the average yield of various crops on a countywide basis is a good model for the method for determining revegetation success. The county average yields are typically based on the results of as many as ten growing seasons. Obviously in situations where revegetation success is measured twice in a four-year period, the same methodology cannot be employed. Further, since county yield averages are not calculated for all crops in all regions, there are no existing models on which to base methods for determining revegetation success for some crops. Further, the benefit that the commenter anticipates would accrue through the use of the county average yield method, i.e., accuracy without penalizing the grower for bad weather, is the same benefit that will result from the regulatory scheme adopted today. Concerning the comment that OSMRE's rules should establish minimum standards that may be strengthened when needed, the final rule is intended to provide just such a minimum standard: Any two years, except the first year, of the responsibility period. The final rule provides State regulatory authorities with the flexibility to impose a more stringent standard when appropriate to local or regional conditions.

Five commenters supported two nonconsecutive crop years for the two-year period for demonstrating soil productivity. One State regulatory authority was concerned that its recently approved regulatory provision allowing measurement of success in two nonconsecutive years would be jeopardized by the proposal to require measurement over the last two years of the responsibility period.

Under final Section 816.116(c)(2), the two growing seasons need not be consecutive. They could be two crop years in a particular crop-rotation sequence. Measurement in nonconsecutive years avoids unduly penalizing the operator for the negative effects of climatic variability. This provision is consistent with the more stringent prime farmland regulations at 30 CFR 823.15(b)(3). In the preamble to the 1983 rule, OSMRE stated that ample justification exists for requiring two consecutive years of proof of revegetation success (*48 FR 40156*, September 2, 1983). OSMRE continues to believe that measurement over two years is important to attenuate the influences of climatic variability, but now realizes that consecutiveness imposes an unnecessary degree of regulatory rigidity. Under a system requiring measurement of revegetation success in two consecutive years, an operator would be unnecessarily penalized if bad weather in the second year of the measurement period caused failure to meet the revegetation success standard after it had been achieved in the first year. The operator has the option under the regulations adopted today to select the years in which measurement of revegetation success will occur in order to produce an outcome that is representative of the reclaimed area's true productivity.

As stated above, several commenters supported measuring revegetation success over any two years during the responsibility period. The final rule provides that productivity be determined on the basis of any two years of the responsibility period, except the first year. The results obtained in the first year of the responsibility period are apt to reflect a carryover effect from practices used initially to establish the vegetative cover. Since any carryover effect from fertilization and other practices used prior to the start of the responsibility period is minimal after the first year of the responsibility period, more accurate results will be obtained by measuring revegetation success in any two of the years following the first year of the responsibility period.

In reference to the carryover effect, OSMRE stated in the preamble to the 1983 revegetation rules that data for proof of reclamation success from the fourth year is more apt to reflect a carryover effect from fertilization and other practices used to initially establish the vegetative cover (*48 FR 40156*, September 2, 1983). This statement was made in the context of supporting the requirement for measurement of revegetation success in the last year of the responsibility period. This statement failed to take into account the fact that annual fertilization of cropland is a normal husbandry practice throughout the entire country. OSMRE recognized this situation in the preamble to the 1979 revegetation regulations which explained that fertilization, seeding and irrigation in accordance with local agricultural practices on cropland or pasture land is not considered a prohibited augmentative practice (*44 FR 15238*, March 13, 1979). Any carryover effect from the initial fertilization would be insignificant compared to the effects of normal annual fertilization.

Five commenters opposed requiring the last year of the responsibility period to be included in measurement of productivity. Some felt that the requirement would put operators at the mercy of the vagaries of the weather. Others felt the proposal was too restrictive. Some questioned why the proposal tied together two separate concepts, the responsibility period and the period for measuring revegetation success. Some favored the consistency with the prime farmland regulations. Four commenters supported requiring that the last year of the responsibility period be included in the measurement of productivity. One commenter felt that bad weather in the last year of the responsibility period could adversely affect the vegetation rendering it less than permanent and sustainable at bond release. One commenter indicated that while two years "may be acceptable in some ecological situations, in acid producing areas the potential for vegetative failure may not manifest itself until several years after mining activities have ceased."

The final rule does not require inclusion of the last year of the responsibility period in the period for measuring revegetation success. Given the influence of weather variability on crop production, a factor long recognized by those involved in agriculture and agricultural studies, it is unreasonable always to require measurement of productivity in the last year of the responsibility period. This provision is consistent with the regulations governing reclamation of prime farmland at 30 CFR 823.15 and avoids penalizing the operator for the negative effects on productivity of adverse weather conditions.

The preamble to the 1983 rule stated that acceptance of data for proof of reclamation success solely from the fourth year would in effect shorten the responsibility period and be inconsistent with SMCRA (*48 FR 40156*, September 2, 1983). The preamble also stated that in all instances the last year of responsibility should be part of the one- or two-year test period (*ibid.*). To require measurement in the last year of the responsibility period is an unnecessarily rigid standard given the variability of weather conditions. The important thing is that revegetation be achieved in two years out of the last four years of the responsibility period, not that it be achieved in any particular year, such as year four or year five. The length of the responsibility period, established by SMCRA, is not abridged by this rule. Further, OSMRE believes that SMCRA makes a distinction between the responsibility period and the period for measuring revegetation success.

While SMCRA specifies the period of the operator's responsibility, it does not specify when, within that period, success is to be measured. In situations where revegetation is demonstrated prior to the last year of the responsibility period, the final bond release inspection would still have to determine that reclamation has been achieved.

Concerning the comment that the last year of the responsibility period should always be measured in order to take into account the effects of any latent acid or toxic subsoil constituents, the commenter may be confusing the requirement to demonstrate revegetation success through measurement of productivity with the general revegetation requirements. Although the rule allows measurement of productivity prior to the end of the responsibility period, it does not state, and is not intended to imply, that bond will be released on an area where reclamation has not been fully achieved. As provided in 30 CFR 800.40(c)(3), "no bond shall be fully released * * * until the reclamation requirements of [SMCRA] and the permit are fully met." The final bond release inspection will evaluate achievement of the general revegetation requirements of 30 CFR 816.111 in addition to the success standards of Section 816.116.

The measurement of productivity for cropland is accomplished using data provided by the permittee. When the productivity of cropland has been measured earlier and success standards were met, the regulatory authority is not required to measure crop production during the final bond release inspection. Rather, such an inspection is a check to see whether the past demonstration of productivity success appears to be continuing.

Seven commenters supported the proposal that revegetation success for postmining land uses other than grazing land, pasture land and cropland be measured during the last year of the operator's responsibility period. One commenter suggested that revegetation success be measured in any one of the last two years of the responsibility period, and one commenter suggested measurement over both of the last two years. One commenter challenged the literature cited in the preamble to the proposal as supporting the one-year period for measuring revegetation success and pointed out that the Washington State forestry practices rules, concerned with replanting trees in clear-cut areas, may have little applicability to reforestation of severely disturbed mined areas. In addition, the commenter asserted that acceptable practices in the moist, fertile ecosystems of the Pacific Northwest may not be appropriate for application to the coal regions of the eastern United States.

The final rule retains the requirement that vegetative success be measured during the last year of the responsibility period for the postmining land uses other than grazing land, pasture land and cropland. In areas of annual average precipitation exceeding 26 inches, the forest ecosystem, once disturbed, reinitiates the process of vegetative succession. The first few years of the emergent successional pattern are prolific with respect to species density and diversity. Vegetative diversity and density increase with time during the five-year responsibility period. Indigenous species invade and become established. Therefore, given the positive relationship between time and vegetative cover, OSMRE believes that the last year of the responsibility period will provide an accurate measurement of revegetation success. It should be noted in response to the comment suggesting significant climatic differences between Washington State and the coal regions of the Eastern United States that the coal-producing regions of Washington State receive annual average precipitation that ranges from 20 to more than 60 inches, a range that coincides with the annual average precipitation in the coal-producing regions of the East.

SECTIONS 816.116(c)(4) and 817.116(c)(4) - NORMAL HUSBANDRY PRACTICES

Proposed Section 816.116(c)(4) allowed certain husbandry practices during the responsibility period if approved by the regulatory authority and if the husbandry practice can be expected to continue as part of the postmining land use or if discontinuance of the husbandry practice after the release of permittee responsibility will not reduce the probability of continued revegetative success. The approved practices cannot include augmented seeding, fertilization, or irrigation without extending the period of responsibility. However, seeding, fertilization, or irrigation performed at levels that do not exceed those normally applied in maintaining comparable unmined land in the surrounding area would not be considered prohibited augmentative activities. The proposed minor change from the existing rule was to substitute the phrase "normal husbandry practices" for the phrase "normal conservation practices." This change was intended to avoid restricting approvable practices to manipulation of the soil alone.

In the preamble to the proposal, OSMRE stated, "Rather than proposing a national rule which would universally allow repair and reseeding of rills and gullies to be considered a normal husbandry practice, OSMRE will evaluate such practices if submitted by a State as a program amendment. Therefore, under the provisions of 30 CFR 732.17 governing State program amendments, OSMRE would consider, on a practice-by-practice basis, the administrative record

supporting each practice proposed by a regulatory authority as normal husbandry practice. The regulatory authority would be expected to demonstrate (1) that the practice is the usual or expected state, form, amount or degree of management performed habitually or customarily to prevent exploitation, destruction or neglect of the resource and maintain a prescribed level of use or productivity of similar unmined lands and (2) that the proposed practice is not an augmentative practice prohibited by section 515(b)(20) of [SMCRA]" (52 FR 28016).

Final Section 816.116(c)(4) is the same as the proposed rule with the exception of the addition of the requirement for approval by OSMRE of proposed husbandry practices according to the State program amendment process. Two commenters suggested that this addition would clarify the rule by making explicit the requirement for prior approval by OSMRE of practices proposed by the State regulatory authority as normal husbandry practices.

One State regulatory authority was concerned that it would have to rejustify husbandry practices, such as the repair of rills and gullies, that already a part of the approved State regulatory program. If OSMRE has given specific approval to a State regulatory program provision that allows a particular practice to occur without restarting the operator's responsibility period, then there would be no need for resubmission of the record supporting that practice to OSMRE for approval. However, to the extent that OSMRE's approval of a State regulatory program does not address normal husbandry practices, the State would have to obtain OSMRE's approval under Section 816.116(c)(4) to allow specific normal husbandry practices to occur without restarting the responsibility period.

One commenter suggested that normal husbandry practices be approved at the State regulatory authority level, without having to seek OSMRE's approval, through the issuance of State policy guidance or the approval of individual reclamation plans. This would be tantamount to a reinstatement of the 1983 rule. As stated in the proposed rule preamble, OSMRE has reconsidered the 1983 rule and concluded it granted flexibility that is inappropriate in a national performance standard. Therefore, the final rule establishes the requirement that OSMRE approval must be obtained before husbandry practice can be allowed to occur under a State regulatory program without restating the responsibility period.

Six commenters supported allowing the repair of rills and gullies as a normal husbandry practice, and one commenter urged that the phrase "repair of rills and gullies" be added to the list of approved practices found in the last sentence of proposed Section 816.116(c)(4). Because OSMRE is convinced that the cited literature supports the repair of rills and gullies in some situations, the final rule establishes a framework within which a State regulatory authority may demonstrate that such repair is a normal husbandry practice. However, since it is also true that repair of rills and gullies is not always simply good husbandry, the final rule does not include the suggested addition to the list of approved practices.

One commenter suggested that the proposed rule did not mention the role of Federal land-managing agencies in approving normal husbandry practices on Federal lands. OSMRE believes that the Federal lands regulations, particularly 30 CFR 740.11(d), which allows Federal land-managing agencies "to include in any lease, license, permit, contract, or other instrument such conditions as may be appropriate to regulate [mining]," adequately recognize the authority of Federal land-managing agencies to regulate surface coal mining and reclamation operations under provisions of law other than OSMRE on lands under their jurisdiction.

One commenter recommended that the final rule provide minimum standards for the State regulatory authorities to use when determining when tree planting, repair of rills and gullies, and other practices are to be considered augmentative versus normal husbandry. The commenter was concerned that the lack of such minimum standards would allow "major gully repair or replanting a large percentage of the trees or shrubs" within the responsibility period under the guise of normal husbandry. The commenter suggested that an example of a minimum standard would be to establish a ceiling, such as five percent of the permit area, that would be subject to a normal husbandry practice without restarting the operator's period of responsibility.

OSMRE's position is that the primary responsibility for regulating surface coal mining and reclamation operations should rest with the States. Federal rules must be capable of nationwide application. The absence of minimum standards in portions of the Federal rules is not a weakening of revegetation requirements but reflects that the rules are designed to account for regional diversity in terrain, climate, soils and other conditions under which mining occurs. The requirements for OSMRE approval of normal husbandry practices proposed by State regulatory authorities based upon State-specific documentation of local husbandry practices will ensure that augmentative practices are not allowed to occur without restarting the operator's period of responsibility.

EFFECT IN FEDERAL PROGRAM STATES AND ON INDIAN LANDS

This rule applies through cross-referencing in those States with Federal programs. They are 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 910, 912, 921, 922, 933, 937, 939, 941, 942, and 947 respectively. The rules will apply in California if the Federal program for that State, which was proposed on October 22, 1987 (*52 FR 39594*), is adopted. The rules also apply through cross-referencing to Indian lands under Federal programs for Indian lands as provided in 30 CFR Part 750. No comments were received concerning unique conditions that exist in any of these States or on Indian lands that would have required changes to the national rule.

III. PROCEDURAL MATTERS

Federal Paperwork Reduction Act

The revegetation rules affected by the changes approved today, Sections 816.116 and 817.116, do not contain new information collection requirements requiring approval from the Office of Management and Budget under *44 U.S.C. 3507*.

Executive Order 12291 and Regulatory Flexibility Act

The DOI has determined that this rule is not a major rule requiring a regulatory impact analysis under Executive Order 12291 (February 17, 1981). Also, DOI certifies that this rule will not have a significant economic effect on a substantial number of small entities and, therefore, does not require a regulatory flexibility analysis under the Regulatory Flexibility Act, *5 U.S.C. 601 et seq.*

National Environmental Policy Act

OSMRE has prepared an environmental assessment 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 assessment is on file in the OSMRE Administrative Record, Room 5315, 1100 L Street NW., Washington, DC.

Agency Approval

Section 516(a) of SMCRA requires that, with regard to rules directed to the surface effects of underground mining, OSMRE must obtain the 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. OSMRE has obtained the written concurrence of the Assistant Secretary for Mine Safety and Health, U.S. Department of Labor.

Author

The principal author of this rule is Patrick W. Boyd, OSMRE, 1951 Constitution Avenue NW., Washington, DC 20240; Telephone: (202) 343-1864.

LIST OF SUBJECTS

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 816 and 817 are amended as set forth herein.

Dated: July 20, 1988.

James E. Cason, Acting Assistant Secretary -- Land and Minerals Management.

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

1. The authority citation for Part 816 is revised to read as follows and the authority citations following the sections in Part 816 are removed:

Authority: Pub. L. 95-87, 30 U.S.C. 1201 et seq., and Pub. L. 100-34.

2. Section 816.116 is amended by revising paragraphs (b)(3)(i), (b)(3)(ii), (c)(2), and (c)(4) to read as follows and the suspension for those paragraphs, as noted in the editorial note immediately following the section in the Code of Federal Regulations, is lifted:

SECTION 816.116 - REVEGETATION: STANDARDS FOR SUCCESS.

* * * * *

(b) * * *

(3) * * *

(i) Minimum stocking and planting arrangements shall be specified by the regulatory authority on the basis of local and regional conditions and after consultation with and approval by the State agencies responsible for the administration of forestry and wildlife programs. Consultation and approval may occur on either a program wide or a permit-specific basis.

(ii) Trees and shrubs that will be used in determining the success of stocking and the adequacy of the plant arrangement shall have utility for the approved postmining land use. Trees and shrubs counted in determining such success shall be healthy and have been in place for not less than two growing seasons. At the time of bond release, at least 80 percent of the trees and shrubs used to determine such success shall have been in place for 60 percent of the applicable minimum period of responsibility.

* * * * *

(c) * * *

(2) In areas of more than 26.0 inches of annual average precipitation, the period of responsibility shall continue for a period of not less than five full years. Vegetation parameters identified in paragraph (b) of this section for grazing land or pasture land and cropland shall equal or exceed the approved success standard during the growing seasons of any two years of the responsibility period, except the first year. Areas approved for the other uses identified in paragraph (b) of this section shall equal or exceed the applicable success standard during the growing season of the last year of the responsibility period.

* * * * *

(4) The regulatory authority may approve selective husbandry practices, excluding augmented seeding, fertilization, or irrigation, provided it obtains prior approval from the Director in accordance with Section 732.17 of this chapter that the practices are normal husbandry practices, without extending the period of responsibility for revegetation success and bond liability, if such practices can be expected to continue as part of the postmining land use or if discontinuance of the practices after the liability period expires will not reduce the probability of permanent revegetation success. Approved practices shall be normal husbandry practices within the region for unmined lands having land uses similar to the approved postmining land use of the disturbed area, including such practices as disease, pest, and vermin control; and any pruning, reseeding, and transplanting specifically necessitated by such actions.

* * * * *

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

3. The authority citation for Part 817 is revised to read as follows and the authority citations following the sections in Part 817 are removed:

Authority: Pub. L. 95-87, 30 U.S.C. 1201 et seq., and Pub. L. 100-34.

4. Section 817.116 is amended by revising paragraphs (b)(3)(i), (b)(3)(ii), (c)(2), and (c)(4) to read as follows and the suspension for those paragraphs, as noted in the editorial note immediately following the section in the Code of Federal Regulations, is lifted:

SECTION 817.116 - REVEGETATION: STANDARDS FOR SUCCESS.

* * * * *

(b) * * *

(3) * * *

(i) Minimum stocking and planting arrangements shall be specified by the regulatory authority on the basis of local and regional conditions and after consultation with and approval by the State agencies responsible for the administration of forestry and wildlife programs. Consultation and approval may occur on either a program wide or a permit-specific basis.

(ii) Trees and shrubs that will be used in determining the success of stocking and the adequacy of the plant arrangement shall have utility for the approved postmining land use. Trees and shrubs counted in determining such success shall be healthy and have been in place for not less than two growing seasons. At the time of bond release, at least 80 percent of the trees and shrubs used to determine such success shall have been in place for 60 percent of the applicable minimum period of responsibility.

* * * * *

(c) * * *

(2) In areas of more than 26.0 inches of annual average precipitation, the period of responsibility shall continue for a period of not less than five full years. Vegetation parameters identified in paragraph (b) of this section for grazing land or pasture land and cropland shall equal or exceed the approved success standard during the growing seasons of any two years of the responsibility period, except the first year. Areas approved for the other uses identified in paragraph (b) of this section shall equal or exceed the applicable success standard during the growing season of the last year of the responsibility period.

* * * * *

(4) The regulatory authority may approve selective husbandry practices, excluding augmented seeding, fertilization, or irrigation, provided it obtains prior approval from the Director in accordance with Section 732.17 of this chapter that the practices are normal husbandry practices, without extending the period of responsibility for revegetation success and bond liability, if such practices can be expected to continue as part of the postmining land use or if discontinuance of the practices after the liability period expires will not reduce the probability of permanent revegetation success. Approved practices shall be normal husbandry practices within the region for unmined lands having land uses similar to the approved postmining land use of the disturbed area, including such practices as disease, pest, and vermin control; and any pruning, reseeding, and transplanting specifically necessitated by such actions.

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