

**DEPARTMENT OF THE INTERIOR****Office of Surface Mining Reclamation and Enforcement****30 CFR Part 942**

RIN 1029-AC50

**Tennessee Federal Regulatory Program****AGENCY:** Office of Surface Mining Reclamation and Enforcement, Interior.**ACTION:** Final rule.

**SUMMARY:** We, the Office of Surface Mining Reclamation and Enforcement (OSM), are finalizing changes to the Tennessee Federal regulatory program regarding performance bonds and revegetation success standards. These revisions provide a mechanism to use our statutory authority to accept financial assurances in the form of trust funds and annuities in Tennessee to fund the treatment of long-term postmining pollutional discharges from surface coal mining operations and thus satisfy performance bond obligations for treatment of those discharges. Our previous regulations also did not facilitate the growth of forests, and we are taking a number of steps to ensure the reestablishment of high quality hardwood forests where the postmining land uses are related to forestry. To minimize competition with woody plants and support healthier tree growth, we are removing the 80% ground cover revegetation success standard for mine sites with postmining land uses of wildlife habitat, undeveloped land, recreation, or forestry; limiting the herbaceous ground cover success standards to those necessary to control erosion and support the forestry-related postmining land use; requiring seed mixes and seeding rates of herbaceous vegetation for those land uses to be specified in the permit; and removing the limitations on the amount of bare areas that can remain after reclamation of mine sites with those land uses.

**EFFECTIVE DATE:** April 2, 2007.

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**SUPPLEMENTARY INFORMATION:**

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**I. Background on the Tennessee Federal Program**

Section 503(a) of the Surface Mining Control and Reclamation Act of 1977 (SMCRA or the Act), 30 U.S.C. 1253, permits a State to assume primacy for the regulation of surface coal mining and reclamation operations on non-Federal and non-Indian lands within its borders under certain conditions. The Secretary of the Interior conditionally approved the Tennessee program on August 10, 1982. However, because of actions that we took pursuant to 30 CFR Part 733 to correct shortcomings in the administration and implementation of the approved Tennessee program on May 16, 1984, the State repealed most of the Tennessee Coal Surface Mining Law of 1980, Tennessee Code Annotated 59-8-301-59-8-339, and its implementing regulations, effective October 1, 1984. As a result, on October 1, 1984, we withdrew approval of the Tennessee permanent regulatory program and promulgated a Federal program for Tennessee under the authority of section 504(a) of the Act, 30 U.S.C. 1254(a). This program appears in 30 CFR Part 942, where it replaced the disapproved State program. With the promulgation of a Federal regulatory program, we became the regulatory authority under SMCRA in Tennessee. You can find background information on the Tennessee Federal program, including our findings and the disposition of comments, in the October 1, 1984, **Federal Register**, 49 FR 38874.

**II. Background on This Rulemaking**

We published the proposed rule underlying this final rule on April 6, 2006, 71 FR 17682. On May 3, 2006, we extended the public comment period until June 30, 2006, and provided notice of a requested public hearing that was held on June 1, 2006, 71 FR 25992.

**III. How and why are we revising the Tennessee Federal program regulations?****A. Section 942.800: Bond and Insurance Requirements for Surface Coal Mining and Reclamation Operations**

On April 6, 2006, we published proposed revisions to the Tennessee Federal program that provided a mechanism to use our authority to implement trust funds and annuities for funding treatment of long-term postmining pollutional discharges. 71 FR 17682. Those revisions, which we are adopting in slightly revised form in this final rule, reflect our efforts to

provide a system suitable for the long-term funding of the treatment of the postmining pollutional discharges that exist in Tennessee and any unanticipated discharges that may occur in the future.

We are adopting new § 942.800(c), which we proposed as § 942.800(b)(4), to provide us with a mechanism to use our statutory authority to accept trust funds and annuities as an alternative system as provided for in SMCRA at Section 509(c), 30 U.S.C. 1259(c), by which permittees may satisfy the requirement to provide a performance bond to cover the treatment of postmining pollutional discharges. Final § 942.800(c) reads as follows:

(c) *Special consideration for sites with long-term postmining pollutional discharges.* With the approval of the Office, the permittee may establish a trust fund, annuity or both to guarantee treatment of long-term postmining pollutional discharges in lieu of posting one of the bond forms listed in § 800.12 of this chapter for that purpose. The trust fund or annuity will be subject to the following conditions:

(1) The Office will determine the amount of the trust fund or annuity, which must be adequate to meet all anticipated treatment needs, including both capital and operational expenses.

(2) The trust fund or annuity must be in a form approved by the Office and contain all terms and conditions required by the Office.

(3) The trust fund or annuity must provide that the United States or the State of Tennessee is irrevocably established as the beneficiary of the trust fund or of the proceeds from the annuity.

(4) The Office will specify the investment objectives of the trust fund or annuity.

(5) Termination of the trust fund or annuity may occur only as specified by the Office upon a determination that no further treatment or other reclamation measures are necessary, that a replacement bond or another financial instrument has been posted, or that the administration of the trust fund or annuity in accordance with its purpose requires termination.

(6) Release of money from the trust fund or annuity may be made only upon written authorization of the Office or according to a schedule established in the agreement accompanying the trust fund or annuity.

(7) A financial institution or company serving as a trustee or issuing an annuity must be one of the following:

(i) A bank or trust company chartered by the Tennessee Department of Financial Institutions;

(ii) A national bank chartered by the Office of the Comptroller of the Currency;

(iii) An operating subsidiary of a national bank chartered by the Office of the Comptroller of the Currency;

(iv) An insurance company licensed or authorized to do business in Tennessee by the Tennessee Department of Commerce and Insurance or designated by the Commissioner of that Department as an eligible surplus lines insurer; or

(v) Any other financial institution or company with trust powers and with offices located in Tennessee, provided that the institution's or company's activities are examined or regulated by a State or Federal agency.

(8) Trust funds and annuities, as described in this paragraph, must be established in a manner that guarantees that sufficient moneys will be available to pay for treatment of postmining pollutional discharges (including maintenance, renovation, and replacement of treatment and support facilities as needed), the reclamation of the sites upon which treatment facilities are located and areas used in support of those facilities.

(9) When a trust fund or annuity is in place and fully funded, the Office may approve release under § 800.40(c)(3) of this chapter of conventional bonds posted for a permit or permit increment, provided that, apart from the pollutional discharge and associated treatment facilities, the area fully meets all applicable reclamation requirements and the trust fund or annuity is sufficient for treatment of pollutional discharges and reclamation of all areas involved in such treatment. The portion of the permit required for postmining water treatment must remain bonded. However, the trust fund or annuity may serve as that bond.

SMCRA, its implementing regulations, and our policy require that the performance bond be sufficient to cover treatment of those discharges in the event that the permittee fails to do so. Section 509(a) of SMCRA, 30 U.S.C. 1259(a), requires that each permittee post a performance bond conditioned upon faithful performance of all the requirements of the Act and the permit. That section of the Act also specifies that "[t]he amount of the bond shall be sufficient to assure the completion of the reclamation plan if the work had to be performed by the regulatory authority in the event of forfeiture \* \* \*." 30 U.S.C. 1259(a). Section 509(e) of the Act provides that "[t]he amount of the bond or deposit required and the terms of each acceptance of the applicant's bond shall be adjusted by the regulatory authority from time to time as affected land acreages are increased or decreased or where the cost of future reclamation changes." 30 U.S.C. 1259(e). The statutory requirements for a "reclamation plan" include the measures to be taken to ensure water quality. 30 U.S.C. 1258(a)(13).

Our regulations at 30 CFR Part 800 implement the requirements of section 509 of the Act, 30 U.S.C. 1259. Those regulations, first promulgated in 1979, were revised in 1983 in a manner that clearly implies that performance bonds must be adjusted when unanticipated events, such as postmining pollutional discharges, increase the cost of reclamation (in this case, treatment of the discharges).

In our discussion of determining bond amounts in the March 13, 1979, **Federal Register** (44 FR 15111), we noted:

The Office recognizes that the regulatory authority cannot reasonably establish the initial bond amount based upon speculative events such as the need to abate ground water pollution, since the operation must be designed initially to prevent such consequences in order to qualify for a permit. However, such unplanned consequences occasionally occur due to improper mining or reclamation, or because an important variable was not evaluated properly. When such consequences are identified prior to the release of all liability and termination of the permit in accordance with Part 807, the permittee's legal obligation to abate them necessarily adds to the cost of reclamation.

Under such circumstances, the regulatory authority would be authorized to impose additional bond liability under that permit, or to retain a larger portion of the total liability than otherwise required in response to an application for release of bond, in order to ensure adequate funding to complete the abatement work required (Sections 805.14(a) and 807.12(d)).

According to this 1979 preamble discussion, regulatory authorities have discretionary authority to increase bonds to reflect the increased costs of reclamation that result from the occurrence of unanticipated events such as postmining pollutional discharges. However, in the preamble to our 1983 revisions to the bonding rules, we indicate that increases in bond amounts under those circumstances are mandatory, not discretionary:

If at any time the cost of future reclamation under the bond changes, the regulatory authority is required to adjust the bond accordingly (Sec. 800.15(a)). Thus, the amount of the bond for any increment must at all times be sufficient to assure the completion of the reclamation plan if the work had to be performed by the regulatory authority.

48 FR 32937, July 19, 1983.

Under 30 CFR 780.21(h) and 784.14(g), one component of the reclamation plan is a hydrologic reclamation plan. Among other things, this plan must include the provision of "water-treatment facilities when needed." Consequently, the bond must be adequate to cover the cost of treating long-term pollutional discharges because treatment of those discharges is part of the reclamation plan.

We further affirmed and clarified our position on financial guarantees for long-term postmining pollutional discharges in a March 31, 1997, document entitled, "Policy Goals and Objectives on Correcting, Preventing and Controlling Acid/Toxic Mine Drainage." Objective 2 under the policy goal concerning environmental

protection requires that financial responsibility associated with acid mine drainage (AMD) be fully addressed. Specifically, the policy includes the following strategies:

Strategy 2.2—If, subsequent to permit issuance, monitoring identifies acid- or toxic-forming conditions which were not anticipated in the mining and operation plan, the regulatory authority should require the operator to adjust the financial assurance.

Strategy 2.3—Where inspections conducted in response to bond release requests identify surface or subsurface water pollution, bond in an amount adequate to abate the pollution should be held as long as water treatment is required, unless a financial guarantee or some other enforceable contract or mechanism to ensure continued treatment exists.

When responding to commenters on the policy who objected to the requirement that permittees post financial guarantees for treatment of pollutional discharges during and after land reclamation (comment no.16), we stated:

Section 509(a) of the Act requires that each permittee post a performance bond conditioned upon faithful performance of all the requirements of the Act and the permit. Paragraph (b) of this Section of the Act specifies that "[t]he amount of the bond shall be sufficient to assure the completion of the reclamation plan if the work had to be performed by the regulatory authority in the event of forfeiture." The hydrologic reclamation plan is part of the reclamation plan to which this section refers. Section 519(c) of SMCRA authorizes release of this bond only when the regulatory authority is satisfied that the reclamation required by the bond has been accomplished, and paragraph (c)(3) specifies that "no bond shall be fully released until all reclamation requirements of this Act are fully met." Furthermore, section 519(b) of the Act provides that whenever a bond release is requested, the regulatory authority must conduct an inspection to evaluate the reclamation work performed, including "whether pollution of surface or subsurface water is occurring, the probability of continuance of future occurrence of such pollution, and the estimated cost of abating such pollution." Therefore, there is no doubt that, under SMCRA, the permittee must provide a financial guarantee to cover treatment of postmining discharges when such discharges develop and require treatment.

On May 30, 2000, our Knoxville, Tennessee Field Office (KFO) issued Field Office Policy Memorandum No. 37 entitled "Policy for Requiring Bond Adjustments on Permitted Sites Requiring Long-Term Treatment of Pollutional Discharges." This policy described the general procedure that the KFO would utilize to require adjustments to performance bonds on sites in Tennessee where unanticipated pollutional discharges are occurring and

long-term treatment is required. The policy requires that treatment costs be estimated based on an assumption that treatment will be needed for at least 75 years, absent convincing evidence to the contrary. Between June and September of the year in which the policy was issued, the KFO ordered some permittees in Tennessee to submit permit revisions to provide for the installation, operation and maintenance of long-term treatment systems and to adjust performance bonds accordingly.

Those permittees then sought administrative review of the KFO's orders. However, on October 2, 2000, the National Mining Association (NMA) filed suit in the United States District Court for the Northern Division of the Eastern District of Tennessee seeking to overturn the policy. *NMA v. Babbitt*, No. 3:00-CV-549 (E.D. Tenn. filed Oct 2, 2000). The plaintiffs alleged that the KFO's Policy Memorandum No. 37 was unlawfully adopted in violation of the rulemaking requirements of the Administrative Procedure Act, is inconsistent with the permitting and bonding provisions of SMCRA by requiring retroactive revision of permits that have already expired and the posting of performance bond for expired permits, and violates the Due Process Clause of the U.S. Constitution.

The Department of the Interior's Office of Hearings and Appeals then placed the administrative appeals of the KFO's orders to individual permittees in abeyance pending resolution of the Federal district court case. On July 24, 2001, the Federal district court litigation also was placed in abeyance in response to NMA's request that the parties pursue settlement of the case. Settlement negotiations are ongoing.

The Tennessee Federal program regulations at 30 CFR 942.800 incorporate the Federal bonding regulations in 30 CFR Part 800 by reference. In addition, that section of the Tennessee Federal program contains a few Tennessee-specific bonding provisions. As adopted on October 1, 1984, the Tennessee Federal program relies upon a conventional bonding system in which site-specific performance bonds must be filed with the KFO. The KFO determines the amount of the performance bond based upon the approved reclamation plan and adjusts that amount periodically when the cost of future reclamation changes. The bond amount must be sufficient to assure completion of the reclamation plan if we have to perform the work in the event of bond forfeiture.

A system that provides an income stream may be better suited to ensuring the treatment of long-term pollutional

discharges, such as AMD, than conventional bonds. Surety bonds, the most common form of conventional bond, are especially ill-suited for this purpose because surety companies normally do not underwrite a bond when there is no expectation of release of liability. Further, a mandate that would require the permittee to immediately post other forms of conventional bonds, such as cash or negotiable bonds, may force insolvency on a permittee that is currently treating pollutional discharges but is unable to provide the large sums required to guarantee treatment through conventional bonding instruments. Insolvency will most likely lead to forfeiture of existing bonds and the proceeds of that forfeiture may not be sufficient to ensure long-term treatment of discharges.

On May 17, 2002, we published an advance notice of proposed rulemaking (ANPR) entitled "Bonding and Other Financial Assurance Mechanisms for Treatment of Long-Term Pollutional Discharges and Acid/Toxic Mine Drainage (AMD) Related Issues." 67 FR 35070. In that ANPR, we sought comments on, among other things, the form and amount of financial assurance that should be required to guarantee treatment of postmining pollutional discharges. Commenters on the ANPR disagreed as to whether financial assurance should be required, but they largely agreed that, if it was, surety bonds are not the best means—or even an appropriate means—of accomplishing that purpose. For instance, the Surety Association of America stated that surface coal mining operations "would not be prudently bondable if the scope of the obligation included perpetual treatment of discharge[s]." According to the Association, "the problem of acid mine drainage requires a funding vehicle, and a surety bond is not a funding vehicle."

Through responses to the ANPR and the experience of Pennsylvania (discussed below), we have determined that the best approach to provide an alternative for financial assurances for long-term treatment of pollutional discharges is to allow the permittee to establish a dedicated income-producing account, such as a trust fund or annuity or both, that is held by a third party as trustee for the regulatory authority. The income stream from a fully funded trust fund or annuity will be used to fund treatment of postmining pollutional discharges (including maintenance, renovation, and replacement of treatment and support facilities as needed), the reclamation of the sites upon which treatment facilities are

located and areas used in support of those facilities. However, until this rulemaking, our regulations did not provide for a mechanism to accept such accounts in satisfaction of the Tennessee Federal program's bonding requirements. The addition of paragraph (c) to 30 CFR 942.800 now implements our statutory authority and establishes the parameters under which trust funds and annuities must operate.

By adding paragraph (c), we are building on the experience of Pennsylvania, which has successfully implemented similar provisions. Pennsylvania amended its Surface Mining Conservation and Reclamation Act to include the authority to accept trust funds and annuities to fund treatment of postmining discharges. Pennsylvania's statutes allow the complete release of any conventional bonds remaining after land reclamation has been fully completed and the revegetation responsibility period has expired for a site with a pollutional discharge if provisions have been made for sound future treatment of that discharge. 52 Pa. Cons. Stat. Ann. 1396.4(g)(3). Pennsylvania's provisions state that sound future treatment must consist of another approved financial instrument, such as a trust fund, that will fully secure the long-term treatment obligation and is applicable to the area associated with that treatment. 52 Pa. Cons. Stat. Ann. 1396.4(d.2). This rule is not intended to mirror the provisions of the Pennsylvania program, but rather to adapt the concepts behind Pennsylvania's program for use in the Tennessee Federal program.

When Pennsylvania submitted the amendment to its program authorizing the use of trust funds and annuities, it characterized those financial instruments as collateral bonds, and we approved them as such. 70 FR 25472, amended at 70 FR 52916. However, the Federal regulations at 30 CFR 800.11(e) provide another option for approving trust funds and annuities. Those regulations implement the provision in section 509(c) of SMCRA, 30 U.S.C. 1259(c), authorizing OSM and the States to establish an "alternative system that will achieve the objectives and purposes of the bonding program pursuant to this section." The regulations at 30 CFR 800.11(e) require that those alternative systems (1) "assure that the regulatory authority will have available sufficient money to complete the reclamation plan for any areas which may be in default at any time;" and (2) "provide a substantial economic incentive for the permittee to comply with all reclamation provisions." As we noted in the proposed rule, establishment of a

trust fund or annuity would satisfy the first criterion, while the permittee's provision of the moneys needed to establish a trust fund or annuity and the express terms of the trust would satisfy the second criterion. 71 FR 17684.

In this rulemaking, we are providing for the use of trust funds and annuities in Tennessee as an alternative bonding system (ABS), as provided for in section 509(c) of the Act. As an ABS, trust funds and annuities are not subject to the provisions of 30 CFR 800.12, 800.20, 800.21, and 800.23 because those provisions pertain only to various types of conventional bonds. Except as otherwise provided in this rule, trust funds and annuities will generally be subject to the other provisions of 30 CFR Part 800. Specific information on the portions of 30 CFR Part 800 that apply to individual trust funds and annuities will be set forth in a formal written trust fund or annuity agreement made between the KFO and the permittee responsible for treating the discharge.

We will allow permittees a reasonable time to fully fund trust funds and annuities rather than requiring a lump-sum deposit as would be required for collateral bonds. We will use the provisions of 30 CFR 800.15(a) on a site-specific basis to establish a schedule for periodic review to ensure that trusts and annuities contain sufficient funds for treatment of the discharge, and maintenance and reclamation of associated facilities.

A permittee with postmining pollutional discharges that establishes a trust fund or annuity to guarantee funding for treatment will be able to secure release of conventional bonds on the portion of their permit that does not support the treatment of the discharge. However, the trust fund or annuity must be fully funded before the permittee qualifies for release of the conventional bond. A fully funded trust fund or annuity would be available to fund treatment and reclamation activities in the event of a permittee's bankruptcy or dissolution.

In implementing this rule, we will first determine whether a postmining pollutional discharge requiring long-term treatment exists. If so, and if the permittee elects to use a trust fund or annuity to satisfy the financial assurance (performance bond) obligation for discharge treatment, we, in consultation with the permittee, will develop a formal written agreement that sets forth the details of the trust fund or annuity. While we will consult in good faith with the permittee on the terms of the trust fund or annuity, including the selection of the trustee, the investment mix making up the trust fund or

annuity, and the amount and duration of the trust agreement or annuity, we retain the final authority and responsibility to establish bond amounts, terms, and conditions, as provided by 30 CFR 800.16 and this rule. In determining the amount needed to fully fund the trust fund or annuity, we will consider the quality and quantity of the discharge, anticipated future changes in discharge quantity and quality, treatment options, support facilities needed, treatment facility maintenance, renovation, and replacement intervals, current and projected investment performance, and any other factors necessary to ensure ongoing treatment and reclamation of the discharge. We will use this rule, existing OSM policies, and computer software designed to estimate treatment and associated costs to calculate the amount of funding required to fulfill treatment obligations.

We anticipate that a fully funded trust or annuity may include provisions for payments to the permittee as a mechanism to cover the cost of water treatment, especially for those permittees no longer generating income from the mining of coal. Payments from the income stream of a fully funded trust fund or annuity will not be considered a bond release or a bond forfeiture. This rule establishes an ABS authorizing the establishment of a trust or annuity that produces an income stream that can be transferred to a permittee or other entity to pay for the treatment costs provided for in § 942.800(c)(8). The trust fund or annuity will also include other provisions that provide for the continuation of treatment in the event that the permittee fails to meet its treatment obligations.

This rule does not alter our existing responsibilities or those of permittees or any other Federal or State agency relating to postmining pollutional discharges. Existing treatment requirements and obligations, as well as permitting and enforcement responsibilities, are not affected by this rule.

Because of the adoption of this rule, we will not be pursuing a national rulemaking regarding the use of trust funds and annuities in response to the ANPR that we published in 2002. The successful implementation of trusts and annuities in the Pennsylvania program and our explicit addition of trust funds and annuities as an ABS in Tennessee with this rulemaking demonstrate that adequate authority for the use of trust funds and annuities is already available under SMCRA and its implementing

regulations. Therefore, a national rule is not needed.

*B. Sections 942.816(f)(3) and (4) and 942.817(e)(3) and (4): Revegetation Success Requirements for Forestry-Related Postmining Land Uses*

On April 6, 2006, we proposed revisions to the Tennessee Federal program regulations regarding ground-cover revegetation success standards for reclaimed lands with postmining land uses of wildlife habitat, undeveloped land, recreation, or forestry. In this final rule, we are adopting the revisions as proposed, with one technical correction and minor editorial modifications to reflect plain language principles. The technical correction replaces the term "mining and reclamation plan" in the proposed rule with "reclamation plan" to be consistent with terminology used elsewhere throughout the Federal regulations.

The revisions modify 30 CFR 942.816(f)(3) and 942.817(e)(3) by eliminating the 80% vegetative ground cover revegetation success standard for reclaimed lands with postmining land uses of wildlife habitat, undeveloped land, recreation, or forestry. The regulations will be changed to state that herbaceous ground cover should be limited to that necessary to control erosion and support the postmining land use and that the permit will specify the ground cover seed mixes and seeding rates to be used. Final §§ 942.816(f)(3) and 942.817(e)(3) read as follows:

(3) For areas developed for wildlife habitat, undeveloped land, recreation, or forestry, the stocking of woody plants must be at least equal to the rates specified in the approved reclamation plan. To minimize competition with woody plants, herbaceous ground cover should be limited to that necessary to control erosion and support the postmining land use. Seed mixes and seeding rates will be specified in the permit.

Section 515(b)(19) of SMCRA, 30 U.S.C. 1265(b)(19), requires establishment of a diverse, effective, and permanent vegetative cover, at least equal to the premining cover, that is capable of self-regeneration and plant succession. The Federal regulations at 30 CFR 816.116 (for surface mining activities) and 817.117 (for underground mining activities) provide national requirements and parameters for revegetation success standards. Sections 816.116(b)(3) and 817.116(b)(3) establish requirements pertinent to revegetation success standards for areas to be developed for postmining land uses of fish and wildlife habitat, recreation, undeveloped land, or forest products. Those regulations provide that

“success of vegetation shall be determined on the basis of tree and shrub stocking and vegetative ground cover.”

At the time that we promulgated the Federal program for Tennessee, the national rules at §§ 816.116(a)(1) and 817.116(a)(1) required the regulatory authority to select the standards for revegetation success and include them in the regulatory program. 49 FR 38874. Therefore, we included specific standards in the Tennessee Federal program at §§ 942.816(f)(3) and 942.817(e)(3) for areas with postmining land uses of wildlife habitat, recreation, or forest products. Those regulations required a minimum 80% ground cover on mined lands reclaimed for those postmining land uses. In the preamble discussion of those rules, we noted that a minimum level of 80% vegetative coverage was necessary to control erosion on the steep terrain that is common to eastern Tennessee. 49 FR 38888.

In addition, we adopted §§ 942.816(f)(4) and 942.817(e)(4) which prohibit bare areas larger than one-sixteenth of an acre in size and that total more than 10% of the area seeded. We adopted these provisions because we believed that they were necessary to prevent the release of bonds on lands that meet the overall requirements of 80% or 90% ground cover, but still have localized areas that are not yet stabilized with respect to soil erosion. 49 FR 38888.

We have learned much more about reestablishing vegetation, particularly trees, on mined land in the years since we adopted those standards. Permittees generally prefer pasture or grazing land as postmining land uses because they do not require the extra work and expense of planting trees and ensuring successful tree establishment. Thus, the reclamation of mine sites has typically resulted in dense grasslands with few trees. Many trees that were planted had low survival rates and required replanting, while those that survived often did not reach their optimal growth potential, which further discouraged operators from considering a land use that required planting trees.

We recognize the importance and benefits of promoting the reestablishment of forests, especially native hardwood forests, on mined land. Consequently, we have determined that changes to our regulations are necessary to promote and enable the establishment of diverse, vigorous forests on reclaimed mine sites. The conventional method of mine reclamation typically includes using bulldozers to grade and track-in spoil, creating smooth slopes. This

method results in a compacted soil surface that not only inhibits root growth of seedlings and planted stock, but also restricts infiltration of precipitation and increases runoff. To prevent erosion from runoff, operators seed the regraded areas with aggressive, quick-growing herbaceous ground covers. This method of reclamation is very effective in producing dense hayland and pastureland. However, it is very detrimental to establishing forested land on mine sites for three reasons. First, the dense herbaceous ground covers used to control erosion compete with newly planted trees and tree seedlings for soil nutrients, water, and sunlight. Second, soil compaction inhibits root growth as well as water infiltration. Third, the dense ground cover provides habitat for rodents and other animals that damage tree seedlings and young trees.

In summarizing research into ground cover and its effects on establishment of trees on mined lands, Jim King and Jeff Skousen of West Virginia University noted in 2003:

The negative effects of overly abundant and aggressive ground cover on the survival and growth of trees planted on reclaimed mine lands has long been known. Trees planted into introduced, aggressive forages [especially tall fescue and sericea lespedeza] often are overtopped by the grass or legume and are unable to break free (Burger and Torbert, 1992; Torbert et al., 1995). The seedlings are pinned to the ground and have little chance for survival. If it is known that trees are to be planted, a tree-compatible ground cover should be seeded that will be less competitive with trees. Tree-compatible ground cover should be slow growing, sprawling or low growing, not allopathic, and non-competitive with trees (Burger and Torbert, 1992). Plass (1968) reported that after four growing seasons the height growth of sweetgum and sycamore planted into an established stand of tall fescue on spoil banks was significantly retarded. Andersen et al. (1989) found that survival and height growth for red oak and black walnut was significantly greater on sites where ground cover was chemically controlled.<sup>1</sup>

Researchers affiliated with the Virginia Polytechnic Institute and State University also found that:

The use of tree-compatible ground covers during reclamation can allow seedlings to survive at rates exceeding the 70% that is necessary to achieve regulatory compliance without the expense of follow-up herbicide treatment. Furthermore, our experience indicates that sowing tree-compatible ground covers at reduced rates often allows invasion by woody vegetation from adjacent forests. The results of this study suggest that sowing

<sup>1</sup> *Tree Survival on a Mountaintop Surface Mine in West Virginia* King, J., J. Skousen, West Virginia University Morgantown, American Society of Mining and Reclamation, 2003.

ground cover at reduced rates achieving 50 to 70% cover, instead of 90% currently required by Virginia's regulations, would also greatly improve the likelihood of hardwood reforestation success.<sup>2</sup>

Researchers from the University of Maine determined that even a small amount of herbaceous ground cover can inhibit tree growth:

Additional research has found that herbaceous vegetation (grasses and broadleaves) in small amounts (<20% cover) around seedlings immediately after planting will substantially reduce early stand growth.<sup>3</sup>

These researchers are united in their findings that even ground cover significantly less than the 80% ground cover standard in Tennessee's rules would still be detrimental to tree survival and growth.

We have also determined that dense herbaceous ground cover impedes the natural succession of native forest plants, thereby frustrating attainment of the requirement in section 515(b)(19) of SMCRA, 30 U.S.C. 1265(b)(19), for establishment of a diverse, effective, permanent vegetative cover of the same seasonal variety native to the area and capable of self-regeneration and plant succession. As Burger and Zipper noted:

Another purpose of low ground cover seeding rates is to allow the invasion of native plant species such as yellow poplar, red maple, birches and other light-seeded trees. Dense ground covers prevent the natural seeding-in of native plants.<sup>4</sup>

While excessive herbaceous ground cover is detrimental to tree growth and survival and natural succession, we are cognizant that some vegetative cover is often needed to meet the cover requirements of 30 CFR 816.111(a)(3) and (4) and 817.111(a)(3) and (4). Additional cover may be needed to control erosion on newly reclaimed mine sites, as required by 30 CFR 816.95(a) and 817.95(a), and to prevent the contribution of additional suspended solids to streamflow outside the permit area, as required by 30 CFR 816.45(a) and 817.45(a) and section 515(b)(10)(B)(i) of SMCRA, 30 U.S.C. 1265(b)(10)(B)(i). However, the amount of vegetative ground cover necessary to control erosion on any particular site is

<sup>2</sup> *Herbaceous Ground Cover Effects on Native Hardwoods Planted on Mined Land* Burger, J.A., D.O. Mitchem, C.E. Zipper, R. Williams, Virginia Polytechnic Institute and State University, American Society of Mining and Reclamation, 2005.

<sup>3</sup> *Top 10 Principles for Managing Competing Vegetation to Maximize Regeneration Success and Long-Term Yields* R.G. Wagner, University of Maine.

<sup>4</sup> *How to Restore Forests on Surface-Mined Land* Burger, J.A., C.E. Zipper, Virginia Polytechnic Institute and State University, Powell River Project, Virginia Cooperative Extension Publication 460-123, Revised 2002.

a function of the site topography, composition of the surface material, precipitation amounts, and the degree of soil compaction. Loosely graded or uncompacted material, particularly if placed on a relatively gentle slope, may have virtually no runoff or erosion and would require little or no herbaceous vegetative ground cover to control erosion. Conversely, highly compacted material placed on a steep slope severely limits infiltration and increases runoff so that a dense vegetative cover may be needed to control erosion.

Researchers have stated:

Non-compacted mine soils have higher infiltration rates and erode less than graded soils. When using the Forestland Reclamation Approach, less ground cover is needed to prevent erosion and protect water quality, and in the process, diverse mixes of trees are able to survive and grow at rates that will create an economically viable forest.<sup>5</sup>

Third-year results show that intensive grading did not result in better ground cover establishment or erosion control. In fact, erosion was highest on the intensively graded plots.<sup>6</sup>

Loosely grading the topsoil or topsoil substitutes on reclaimed mine sites will result in less compacted growing media, which will increase water infiltration and limit the amount of runoff. This in turn will limit erosion and sedimentation as well as make more water available for tree growth. Limited compaction is also more favorable to tree root growth, which will increase survival and growth rates.

Forestry researchers agree that productive forest land can best be created on reclaimed mine land by using techniques that we will refer to as the Forestry Reclamation Approach (FRA). The FRA is a series of five techniques designed to reestablish healthy productive forests on reclaimed mine lands. These techniques include (1) Creating a suitable rooting medium for tree growth that is no less than four feet deep and that is comprised of topsoil, weathered sandstone and/or the best available material; (2) loosely grading the topsoil or topsoil substitute to create a non compacted growth medium; (3) using herbaceous ground covers that are compatible with growing trees; (4) planting two types of trees—

early succession species (for wildlife and soil stability) and commercially valuable crop trees; and (5) using proper tree-planting techniques.

We examined the factors in Federal and State regulations that may act as impediments to implementing the FRA. We determined that there were no regulations regarding backfilling and grading that would act as impediments to implementation of the provisions of the FRA that require a minimum of four feet of topsoil or topsoil substitutes to be loosely graded. Thus, we did not propose any changes in our backfilling and grading regulations as part of this rulemaking.

However, we did identify the ground cover standards and bare area restrictions adopted as part of the Tennessee Federal program on October 1, 1984, as impediments to the FRA and disincentives to forest restoration. Elimination of the 80% vegetative ground cover standard and bare area restrictions will provide us with the flexibility to adjust the amount of vegetative ground cover required on mine sites with postmining land uses related to forestry to levels that are sufficient to control erosion without impairing tree growth and survival. To minimize competition with woody plants while meeting other regulatory requirements, we are revising our rules to specify that herbaceous ground cover should be limited to that amount necessary to control erosion and support the approved postmining land use. We will take into account all site characteristics when determining the level of vegetative ground cover suitable for a mine site and require permittees to specify the ground cover seeding mixes and seeding rates in the permit.

As proposed, we are also expanding the postmining land uses to which the regulations at §§ 942.816(f)(3) and 942.817(e)(3) apply by including undeveloped land and by modifying the postmining land use of forest products to forestry. We made these changes to accurately reflect the postmining land uses that require the establishment of trees and shrubs. The revised version of the national regulations at §§ 816.116(b)(3) and 817.116(b)(3) that we adopted in a separate rulemaking on August 30, 2006, likewise includes undeveloped land as a postmining land use to which its requirements apply. See 71 FR 51695–51697.

SMCRA and its implementing regulations clearly require control of erosion and prevention of additional sedimentation. They also require establishment of a vegetative cover that is capable of stabilizing the soil surface from erosion. See 30 CFR 816.111(a)(4)

and 817.111(a)(4). At the same time, research has demonstrated that many types of herbaceous ground cover are detrimental to tree growth and natural succession and thus would impede attainment of the postmining land uses of wildlife habitat, recreation, or forestry. The regulatory modifications that we are adopting in this rule will ensure that the FRA can be effectively implemented in Tennessee.

### *C. Removal of Restrictions on the Amount of Bare Areas for Postmining Land Uses of Wildlife Habitat, Undeveloped Land, Recreation, or Forestry*

As proposed, we are revising the Tennessee Federal program regulations to exempt sites with postmining land uses of wildlife habitat, undeveloped land, recreation, or forestry from the restrictions of §§ 942.816(f)(4) and 942.817(e)(4) concerning bare areas. This change facilitates implementation of the FRA, which requires the use of less competitive herbaceous vegetative ground covers at lower seeding rates, or in some cases no herbaceous ground cover at all. Consequently, some areas may be essentially bare except for tree seedlings and volunteer herbaceous vegetation. As we noted earlier, reduced levels of herbaceous vegetative ground cover are necessary for natural succession of native forest plants and to reduce competition between grasses and legumes and planted tree seedlings for water, nutrients and sunlight. To achieve this goal, some areas must be devoid of herbaceous ground cover because many native woody plants and forbs require bare soil conditions for seed germination. In addition, most traditionally planted herbaceous ground cover species are not expected to be part of the mature forest plant community.

Final §§ 942.816(f)(4) and 942.817(e)(4) reads as follows:

(4) Bare areas shall not exceed one-sixteenth ( $\frac{1}{16}$ ) acre in size and total not more than ten percent (10%) of the area seeded, except for areas developed for wildlife habitat, undeveloped land, recreation, or forestry.

Nothing in this rule change should be construed as negating the requirement in 30 CFR 816.111(a)(3) and 817.111(a)(3) that reestablished vegetation on mined lands be at least equal in extent of cover to the natural vegetation of the area. Nor does this change alter the applicability of the erosion control requirement in 30 CFR 816.95(a) and 817.95(a).

<sup>5</sup> *Herbaceous Ground Cover Effects on Native Hardwoods Planted on Mined Land* Burger, J.A., D.O. Mitchem, C.E. Zipper, R. Williams, Virginia Polytechnic Institute and State University, American Society of Mining and Reclamation, 2005.

<sup>6</sup> *Influence of Grading Intensity on Ground Cover Establishment, Erosion, and Tree Establishment on Steep Slopes* Torbert, J.L., Burger, J.A., Virginia Polytechnic Institute and State University, International Land Reclamation and Mine Drainage Conference and the Third International Conference on the Abatement of Acidic Drainage, 1994.

#### IV. How did we respond to the comments that we received on the proposed rule?

##### A. Section 942.800(c), (proposed as § 942.800(b)(4)): Bond and Insurance Requirements for Surface Coal Mining and Reclamation Operations

Of the 13 commenters on the proposed revisions to 30 CFR 942.800(b), which we are adopting as 30 CFR 942.800(c) in this final rule, four were coal companies, two were associations representing the coal industry, two were government agencies, two were environmental groups, one was an association representing mining states, one was an organization that administers trusts in other states, and one was a private citizen.

Seven commenters generally supported the concept of using trust funds and annuities to satisfy financial assurance requirements for treatment of long-term postmining pollutional discharges, but requested that we put more details concerning the creation and administration of those mechanisms in the rule.

We appreciate the support from these commenters. However, we do not find it necessary or appropriate to adopt the suggestions for more specific regulations regarding the creation and administration of trust funds and annuities. The purpose of this rule is to provide us with mechanism to use our statutory authority to accept trust funds and annuities in lieu of conventional performance bond instruments to fund treatment of postmining pollutional discharges. The final rule establishes a framework (with safeguards) within which we will accept trust funds and annuities. It is not, nor was it intended to be, a handbook that specifies all the details of how trust funds or annuities would work. Those details are best worked out on an individual basis, taking into consideration the characteristics of the discharge, the mine site, the investment instrument, and economic projections at the time that the trust or annuity is finalized. The KFO will address the specifics of each trust fund or annuity in formal written agreements with permittees. This approach is consistent with the manner in which conventional bond amounts are calculated, which is left to the discretion of the regulatory authority. In situations where we are the regulatory authority, Directive TSR-1, "Handbook for Calculation of Reclamation Bond Amounts," governs those calculations.

Two commenters requested that we either increase bond amounts or require both bonds and trusts on the same mine

site. We find that there is no legal basis or practical reason to do so. Under section 509(a) of SMCRA, "[t]he amount of the bond shall be sufficient to assure the completion of the reclamation plan if the work had to be performed by the regulatory authority in the event of forfeiture and in no case shall the bond for the entire area under one permit be less than \$10,000." 30 U.S.C. 1259(a). In addition, section 509(c) specifies that an ABS, such as the trust funds and annuities approved under this rule, must "achieve the objectives and purposes of the bonding program pursuant to this section." 30 U.S.C. 1259(c). Because § 942.800(c)(1) requires the trust fund or annuity to "be adequate to meet all anticipated treatment needs, including both capital and operating expenses," the amount of the trust fund or annuity should be sufficient to meet the requirements of section 509(c) of SMCRA. On a case-by-case basis, depending upon the stage of mining during which a trust fund or annuity is established, a mine may have both conventional bonds and a trust fund or annuity. Requiring multiple bonds in all cases goes beyond the requirements of section 509(c) and would place an unnecessary burden on permittees.

In the remainder of this section of the preamble, we will discuss comments directed at specific sections of our revision to § 942.800, followed by comments of a more general nature that were directed to the use of trust funds and annuities. We will not discuss comments that are beyond the scope of this rulemaking, such as comments that do not pertain to the rule provisions that we proposed to revise on April 6, 2006.

##### Section 942.800(c)(1), (Proposed as § 942.800(b)(4)(i))

Subsection 942.800(c)(1) provides that we will determine the amount of the trust fund or annuity, which must be adequate to meet all anticipated treatment needs, including both capital and operating expenses.

Five commenters suggested that the method for determining the amount of the trust fund or annuity must be objective and clearly stated in the rule. Two commenters recommend that we use the AMDTreat software (a computer program used to estimate costs associated with treating discharges) or the Pennsylvania law, as a model, to determine the amount needed. One commenter provided two mathematical formulas to calculate the present value of the amount needed to fund the trust, while another commenter noted that historic operating and capital costs for chemical treatment and construction of

the treatment systems are important indicators of future costs. Also, a commenter indicated that data from the permittee should be used to determine the amount of the trust fund or annuity because of personal experience with OSM requiring excessive bond amounts based on outdated and erroneous information.

As previously noted, our rule establishes a framework (with safeguards) within which we will accept trust funds and annuities. It is not, nor was it intended to be, a handbook that specifies all the details of how trust funds or annuities would work. Those details are best worked out on an individual basis, taking into consideration the characteristics of the discharge, the mine site, the method of treatment, the investment instruments, and economic projections at the time that the trust or annuity is finalized. Consequently, we are not making the changes sought by the commenters. We do not believe that it is advisable to limit our flexibility by including all the variables that may factor in to the determination of the amount of the trust fund or annuity in the rule. Doing so could restrict our ability to consider the most current information and technology available when determining the amount of money needed to fully fund a trust fund or annuity.

When calculating the amount of a trust fund or annuity, we plan to look at, but are not limited to, the following sources: Historic treatment cost data (if any) supplied by the permittee; existing publicly available software, such as AMDTreat; and publicly available policies and guidelines, such as OSM Directive TSR-1, "Handbook for Calculation of Reclamation Bond Amounts." For instance, the AMDTreat software developed cooperatively by the Pennsylvania Department of Environmental Protection, the West Virginia Department of Environmental Protection, and OSM is one tool available to the KFO to use to estimate the costs of treatment and the costs of constructing and maintaining all associated treatment facilities.

##### Section 942.800(c)(2), (Proposed as § 942.800(b)(4)(ii))

In subsection 942.800(c)(2), we require that the trust fund or annuity be in a form that we approve and contain all the terms and conditions that we require. We received no comments on this provision.

##### Section 942.800(c)(3), (Proposed as § 942.800(b)(4)(iii))

In subsection 942.800(c)(3), we require that a trust fund or annuity

irrevocably establish the United States or Tennessee as the beneficiary of the trust fund or of the proceeds from the annuity. This provision is intended to ensure that moneys in the trust fund or annuity will be available to the regulatory authority for treatment regardless of an operator's financial circumstances or business status.

The one commenter on this subsection recommended that the rule be revised to allow trust accounts established for purposes of termination of jurisdiction to name alternative trust beneficiaries, such as the State of Tennessee. We disagree with the commenter's assumption that trust funds or annuities will be established for purposes of termination of jurisdiction. This rulemaking provides for the establishment of a trust fund or annuity as an ABS, which means that we are retaining jurisdiction over the mine site with respect to treatment of the postmining pollutional discharge. However, we are accepting the commenter's suggestion to name the State of Tennessee as an alternative beneficiary. When OSM became the regulatory authority for the State of Tennessee, we stated that the bonds posted for the Federal program for Tennessee would be payable to "The United States or the State of Tennessee" \* \* \* so as to ease the transition in the event that [Tennessee] reassumes primary regulatory authority." 49 FR 38877-38878. Because conventional bonds in Tennessee are payable to the United States and the State of Tennessee, we decided to require trust funds and annuities to be treated in a similar fashion to remain consistent with existing provisions. We have revised § 942.800(c)(3) to include this provision to be consistent with § 942.800(b)(2).

Section 942.800(c)(4), (Proposed as § 942.800(b)(4)(iv))

Subsection 942.800(c)(4) requires that we specify the investment objectives of the trust fund or annuity. Four commenters stated that the investment objectives of the trust fund should be both defined in the rule and spelled out in the trust agreement. The commenters asserted that the permittee should choose the investment objectives subject to approval by the regulatory authority. The commenters opined that if the regulatory authority alone selects the investment objectives, it may use an overly conservative mix of assets that may adversely impact the investment performance of the trust. Additionally, one commenter stated that trusts created under these rules should allow Tennessee law to regulate the duties and

obligations of the trustees, which would include making proper investment decisions. Another commenter recommended deleting this subparagraph entirely because OSM is not equipped to control the investment objectives of the trust fund or annuity. The commenter argued that the investment objectives of the trust should be established by the trust agreements themselves and by professionals with experience in managing trust accounts.

We are adopting the rule as proposed because (1) We see no benefit to restricting our flexibility by specifying investment objectives in the rule, and (2) we must retain final control of the investment objectives to protect the assets of the trust or annuity and ensure that sufficient funds will be available for treatment. However, nothing in this rule will prevent us from implementing this provision in a manner consistent with the other comments that we received on this subparagraph, should we determine that it would be appropriate and beneficial to do so. Also, while we retain ultimate control of the investment objectives, which will be defined in the trust or annuity agreement, the trustee will make decisions regarding the investment of the assets of the trust fund or annuity. Trustees have an inherent obligation to comply with Tennessee law, so there is no need for us to add that requirement to this rule.

Section 942.800(c)(5), (Proposed as § 942.800(b)(4)(v))

Subsection 942.800(c)(5) provides that termination of the trust fund or annuity may occur only as specified by OSM upon a determination that no further treatment or other reclamation measures are necessary, that a replacement bond or another financial instrument has been posted, or that the trust fund or annuity can no longer be administered to carry out the purpose for which it was established. As an example of a trust fund or annuity that is terminated because it can no longer carry out the purpose for which it was established, the trust documents may specify that a trust will be terminated if the regulatory authority determines that it is too small to be administered effectively. This provision allows us to keep the trust fund or annuity in place as long as necessary and practical to maintain and reclaim treatment facilities.

Five commenters asserted that the rule should address the duration of the trust and the criteria for termination of the trust fund or annuity. The commenters requested the establishment of objective criteria, based on time or other factors, to establish the point at which the trust fund or annuity

must be terminated and the remaining assets of the trust or annuity must be returned to the permittee. One commenter suggests that we modify the rule to require the regulatory authority to make a determination, based on site-specific information, of how long treatment is anticipated. The commenter further suggests that we modify the rule to provide for monitoring of the untreated discharge for a period not to exceed two years after treatment is completed. After two years, the trust should be terminated and the proceeds returned to the operator.

We do not agree that the suggested provisions should be part of the rule. In order to meet the purposes of § 509 of the Act, the alternative system should meet the objectives and purposes of the bonding program established by SMCRA, including the requirement that liability "be for the duration of the surface coal mining and reclamation operation," 30 U.S.C. 1259(b). Consequently, each agreement for a trust fund or annuity will specify the anticipated length of treatment, based on site-specific information. Defining treatment goals is an integral part of determining the funds necessary for sustaining the trust fund or annuity. Furthermore, if appropriate, the formal trust fund or annuity agreement may define a post-treatment monitoring program and the program's anticipated duration. We intend for trust funds and annuities to be an additional option for permittees to fulfill their bonding obligations, while providing greater flexibility than conventional bonds.

It is important to distinguish the duration of the trust or annuity from the duration of the obligation to the permittee to perform treatment of a pollutional discharge. We are providing that a trust fund or annuity may be terminated if replaced by another bond or financial instrument in § 942.800(c)(5), consistent with § 800.30 and other provisions of part 800. Thus, we anticipate that a trust or annuity of limited duration may need to be replaced by another bond or financial instrument if the permittee's obligation to treat a pollutional discharge extends beyond the term of the trust or annuity. Rather than establishing an arbitrary duration in this rule, we have chosen to set the duration of the trust fund or annuity on a case-by-case basis, which will allow us to consider the anticipated need for treatment for each site, the permittee's proposals for meeting the treatment obligations, and other considerations, such as the requirements of Tennessee law.

One commenter noted that the specification of objective performance

standard criteria, such as reestablishment of biologic integrity, would eliminate any potential dispute between the permittee and OSM as to when it is appropriate to terminate the trust fund or annuity. According to the commenter, these types of objective performance standards exist in provisions of the Act detailing when a bond may be released.

In response, we note that the trust or annuity agreement will specify treatment goals and requirements. We see no need or purpose to limit our flexibility by incorporating specific criteria in the rule itself. Indeed, doing so may be impossible or impractical, given the variation in discharges and the treatment standards applicable to those discharges. The KFO will evaluate whether the permittee has met the treatment goals in the agreements before terminating the trust or annuity. In order to provide a structure for how and when a trust fund or annuity will be released, we intend to incorporate the procedures for bond release under 30 CFR 800.40 into the formal agreement creating the trust fund or annuity. This provision will provide a permittee with a mechanism for terminating the trust fund or annuity in the event that the permittee believes that no further treatment or other reclamation measures are necessary. We also intend to incorporate the notification procedures of § 519 of the Act and 30 CFR 800.40 into the trust documents in order to inform the public about any request to release the trust fund or annuity.

Section 942.800(c)(6), (Proposed as § 942.800(b)(4)(vi))

Subsection 942.800(c)(6) provides that the release of money from the trust fund or annuity may be made only upon our written authorization. As discussed below, we have modified this provision to require that release of money from the trust fund or annuity to any source may be made only upon our written authorization or as a disbursement according to a schedule established in the agreement accompanying the trust fund or annuity. As we noted in the preamble to the proposed rule, we included this provision in our rule to ensure that we are aware of all expenditures from the trust fund or annuity and that the disbursements are used for their intended purpose, 71 FR 17684. While we expect that the permittee will be treating the discharge with funds from the trust fund or annuity, we also intend that the trustee have the authority to employ other entities to continue treatment in the event that the permittee cannot or does

not undertake the actions required for compliance.

One commenter stated that we should allow withdrawal or release of funds according to the terms of the trust or annuity agreement instead of requiring written authorization to release money from the trust fund or annuity to the permittee. Another commenter suggested that we allow distributions of the funds on an annual basis to reimburse the permittee for capital investments and operating and maintaining treatment facilities. Similarly, another commenter stated that the trust fund or annuity agreements should include specific payment schedules for treatment costs. Finally, one commenter suggested that we modify this subsection to indicate the criteria that we will follow to release funds from the trust fund or annuity and clarify that release of funds to a permittee will not impair the ability of the fund to guarantee treatment.

We have modified the rule to include the option of disbursing funds according to a schedule established in the trust fund or annuity agreement. That schedule could provide for annual payments if desired. Disbursement according to a schedule established in the trust fund or annuity agreement would meet our objective of ensuring that we are aware of withdrawals from the trust fund or annuity and that those funds are disbursed only for legitimate purposes.

However, we do not agree that establishing release criteria in the rules would be beneficial or appropriate. Those details are best determined on a case-by-case basis; they will be set forth in the agreement accompanying the trust fund or annuity. The commenter's concern that release of funds to the permittee may impair the ability of the trust fund or annuity to guarantee treatment is misplaced. We will use our authority under 30 CFR 800.15(a) to periodically evaluate all trust funds and annuities to ensure that sufficient funds will be available to meet the treatment mandate. If that evaluation indicates that a shortfall exists or will develop, we will require that the permittee provide additional funds to supplement the trust fund or annuity.

Section 942.800(c)(7), (Proposed as § 942.800(b)(4)(vii))

In subsection 942.800(c)(7), we specify which financial institutions and companies may serve as trustees or issue annuities. These requirements are intended to ensure that only qualified businesses and institutions administer the trust funds and annuities, thus reducing the possibility that the trust

funds and annuities could be mismanaged. In a change from the proposed rule, we are adding insurance companies licensed or authorized to do business in Tennessee to the list of acceptable financial institutions to issue annuities for the treatment of long-term postmining pollutional discharges. This addition reflects the fact that insurance companies are major providers of annuities.

One commenter suggested changing the rule to allow the permittee to pick the trustee subject to OSM approval. In response, we note that nothing in the rule would prohibit this arrangement. We expect to collaborate with a permittee in the establishment of a trust fund or annuity, including the selection of the trustee.

Three commenters suggested that we allow entities organized as non-profit organizations under 26 U.S.C. 501(c)(3), such as The Clean Streams Foundation, Inc. (CSF), to act as trustees through a participation agreement. CSF currently acts as a trustee for trust funds for water treatment systems in Pennsylvania. The commenters were concerned that organizations such as CSF might not meet the requirements of this subsection and would not be eligible to serve as trustees in Tennessee. One commenter stated that organizations like CSF are in a better position to administer trusts because most financial institutions are unwilling to take title to real property or to oversee the operation of treatment facilities. According to the commenter, organizations such as CSF can perform these and other functions that financial institutions are unwilling to undertake. In addition, the commenter recommended that § 942.800(c)(7) (proposed as § 942.800(b)(4)(vii)) be revised to allow any organization to serve as a trustee as long as the custodian of the financial assets of the trust fund is an appropriate financial institution. Another commenter stated that the use of non-profit organizations would provide tax advantages to permittees and noted that Pennsylvania has extensive experience setting up charitable trusts for this purpose.

As we noted in the preamble to our proposed rule, we want to ensure that institutions eligible to serve as trustees or to issue annuities are qualified business institutions capable of administering the trust funds or annuities in a competent manner so that the trust fund or annuity will remain solvent for the long-term treatment of pollutional discharges, 71 FR 17684. We recognize that Pennsylvania's regulations allow for State or Federally regulated trust companies to act as trustees and issue annuities. Finally, 30

CFR 942.800(c)(7) likewise provides that any financial institution or company with trust powers and offices located in Tennessee is eligible to participate in the program as long as the activities of the institution are examined or regulated by a State or Federal agency. This rule does not prohibit non-profit organizations from becoming trustees provided the organization meets the qualifications set forth in the rule. Nor does it prohibit the permittee or the institution acting as the trustee from contracting with a non-profit organization to administer the treatment system if the permittee elects not to operate that system.

Section 942.800(c)(8), (Proposed as § 942.800(b)(4)(viii))

Subsection 942.800(c)(8) provides that trust funds and annuities must be established in a manner that guarantees that sufficient moneys will be available to pay for treatment of postmining pollutional discharges (including maintenance, renovation, and replacement of treatment and support facilities as needed), the reclamation of the sites upon which treatment facilities are located and areas used in support of those facilities. The language of the final rule is more precise than that of the proposed rule, which would have required that "trust funds and annuities be established to guarantee that funds are available to pay for treatment of postmining pollutional discharges or reclamation of the mine site or both." As discussed below, commenters found the proposed rule language too broad.

One commenter stated that the use of trust funds and annuities as an alternative bonding mechanism should be limited to treatment of postmining pollutional discharges exclusively. According to the commenter, the proposed rule would allow us to use moneys from trust funds and annuities on lands that previously met performance standards and have received release of all conventional bonds. Consequently, the commenter recommended deletion of the phrase "or reclamation of the mine site or both" from this subsection. Similarly, a different commenter requested that we clarify in the rule that trust funds and annuities are not available to meet general reclamation requirements.

Another commenter stated that we have inconsistently described the scope of activities for which the trust fund or annuity is established. The commenter noted that while proposed § 942.800(b)(4) states that the scope of the rule is limited to "treatment of long-term postmining pollutional discharges;" proposed subparagraph

§ 942.800(b)(4)(i) references "all anticipated treatment needs," proposed subparagraph § 942.800(b)(4)(v) references "treatment or reclamation measures," and proposed § 942.800(b)(4)(viii) references "treatment of postmining pollutional discharges or reclamation of the mine site, or both." The commenter recommended that we delete the reference to "reclamation" in subparagraphs (v) (as proposed) and (viii) (as proposed) and use the term "long-term postmining pollutional discharge."

We do not agree with the commenters that the trust fund or annuity should be used exclusively for treatment of long-term postmining pollutional discharges. While that is its primary purpose, we also need to ensure that funds are available for maintenance, renovation, and replacement of the treatment system as necessary and, once there is no longer a need for treatment, for reclamation of the land upon which treatment facilities are sited, together with any areas used to support those facilities, such as access roads. Further, we agree with the commenters that a trust fund or annuity is not intended to be used for the reclamation of portions of the mine site not associated with a treatment facility or used in support of such a facility. We recognize that the proposed language may have been too broad and subject to misinterpretation. Consequently, we have used revised § 942.800(c)(8) to specify the activities which may be funded as treatment and reclamation.

Section 942.800(c)(9), (Proposed as § 942.800(b)(4)(ix))

In subsection 942.800(c)(9), we allow the release of conventional bonds posted for the mine site as a whole if, apart from the pollutional discharge and associated treatment facilities, the permittee has met all applicable reclamation requirements and has fully funded a trust fund or annuity adequate for treatment of long-term postmining pollutional discharges and reclamation of areas associated with that treatment. The establishment of trust funds or annuities for treatment of long-term pollutional discharges will constitute a replacement of bonds under 30 CFR 800.30 for the areas upon which the discharge and treatment and support facilities are located. Once a fully funded trust fund or annuity exists, there is no need to retain bonds for other areas for which all reclamation requirements have been met and the revegetation responsibility period has expired. Conventional bonds for those areas may be released, subject to the requirements of 30 CFR 800.40.

Two commenters requested that we clarify this subsection to emphasize the long-term nature of the problem. These commenters also found our use of the word "reclamation" in the final phrase of this subsection confusing. According to the commenters, the term "reclamation" should refer only to the removal of the treatment facility and reclamation of the ground where it was located, not mining impacts in the area. The commenters recommend modifying the final part of subparagraph (ix) (as proposed) to state, "\* \* \* and the sum in the trust fund is sufficient to guarantee the treatment of the pollutional discharges for as long as it will be needed and to reclaim the treatment facilities at the end of that time."

While we have made minor wording changes in subparagraph (9) for clarity, we do not find it necessary or appropriate to adopt the language proposed by the commenters. Like the proposed rule, the final rule requires that the trust fund or annuity be "sufficient for treatment of pollutional discharges and reclamation of all areas involved in such treatment." This language establishes the appropriate scope of the trust fund or annuity, which includes treatment of the discharge and reclamation of areas upon which treatment facilities are located and areas used in support of those facilities. The language proposed by the commenters would not necessarily include reclamation of areas used in support of treatment facilities. We also find it unnecessary to add the qualifier "long-term" before "pollutional discharge" in subparagraph (9) because the heading of paragraph (c) clearly states that the entire paragraph applies only to sites with long-term postmining pollutional discharges.

Another commenter requested that we replace the word "may" with the word "shall" in this subparagraph to remove any uncertainty concerning approval of final bond release once the trust fund or annuity to address long-term pollutional discharges is established. A different commenter stated that the rule should be revised to clarify that the final bond release would occur when the trust fund or annuity was fully funded.

Both section 519(c) of SMCRA, 30 U.S.C. 1269(c), and the Federal regulations regarding approval of bond release applications at 30 CFR 800.40(c) provide that the regulatory authority may release all or part of the bond for the entire permit area or an incremental area if it is satisfied that reclamation has been accomplished. Therefore, a change from "may" to "shall" in this rule would be inconsistent with the bond

release provisions of both the Act and our bond release rules. Consequently, we are not making the requested change. However, in response to the second comment, we are changing the language of the rule slightly to specify that the trust fund or annuity must be fully funded before conventional bonds may be released and to make it clear that release of the conventional bond will not extend to the treatment of discharges.

Other comments referring to subsection 942.800(c)(9) were primarily concerned with termination of jurisdiction. We discuss the relationship between termination of jurisdiction and this rulemaking in the General Comments on § 942.800(c) below.

General Comments on § 942.800(c), (Proposed as § 942.800(b)(4))

One commenter stated that the proposed rule contained insufficient detail about the mechanics of how trusts will be created and administered. As a result, the commenter argued that he could not adequately comment on the proposal. Additionally, the commenter asserted that by not including those details, we violated the Administrative Procedure Act (APA). The commenter noted that the purpose of the notice requirement in § 553(b) of the APA is to allow potentially affected members of the public to file meaningful comments under § 553(c) of the APA. According to the commenter, it was impossible to submit meaningful comments on the proposed rule because of the lack of detail on how the process would work.

As we noted above and in the preamble to the proposed rule, we proposed the regulations at § 942.800(b)(4) (now § 942.800(c)) to provide the KFO with a mechanism to use our statutory authority to establish trust funds and annuities. 71 FR 17684. The rule included nine criteria that all trust funds and annuities would be required to meet, as well as an extensive preamble discussion. We believe that this information was sufficient to provide a basis for informed comment, both on the concept of trust funds and annuities for the treatment of long-term postmining pollutional discharges and on the criteria for those funding mechanisms. The comments that we received from other persons support that conclusion.

We also complied with the other notice requirements of § 553(b) of the APA by stating the time, place, and nature of public rulemaking proceedings, by referring to the legal authority under which the rule was proposed, and by providing the terms or substance of the proposed rule or a

description of the subjects and issues involved. We provided instructions on how to submit comments on the proposed rule, extended the public comment period, and provided notice of a requested public hearing that was held on June 1, 2006. 71 FR 17682; 71 FR 25992.

Two commenters stated a preference for approval of the use of trust funds and annuities as an ABS rather than as a collateral bond. One of those commenters stated that trust instruments are not traditional bonds that would fit the collateral bond provisions of § 800.21. The other commenter noted that although he preferred treating trust accounts as an ABS, they could also qualify as collateral bonds.

As previously stated in this preamble, we are approving trust funds and annuities as an ABS. Trust funds and annuities meet the requirements for an ABS as set forth in 30 CFR 800.11(e) because once they are fully funded, the trust accounts or annuities will ensure that we will have sufficient funds to complete the reclamation plan for any areas on which the permittee may be in default on reclamation obligations at any time. Additionally, the permittee provides the money needed to establish a trust fund or annuity. Thus, the permittee has a substantial economic incentive to comply with all reclamation provisions as required by the second criterion for establishing an ABS under 30 CFR 800.11(e).

Three commenters stated that the rule contained no explanation as to which site-specific circumstances qualify as a long-term pollutional discharge. According to the commenters, failure to define the term "pollutional discharge" would allow the rule to be extended to situations beyond its intended scope. Two commenters stated that the term should mean only discharges that will exist after reclamation has been completed and will not meet applicable standards for point-source discharges that are subject to the Clean Water Act (CWA). Another commenter proposed that we define pollutional discharges as "discharges that cannot meet State water quality standards or approved alternative standards." This commenter stated that such a definition would limit the applicability of this rule to the postmining situations for which it was intended.

We do not agree with the commenters that the term "pollutional discharge" needs to be defined as part of this regulation, nor do we understand how the lack of a definition could result in misuse of this rule. We have used this term for more than a decade without

confusion. Any discharge that is not in compliance with applicable standards is a pollutional discharge.

Three commenters noted that the method of treatment could have a major influence on the amount and terms and conditions of the required trust fund or annuity. According to the commenters, the rule should recognize that multiple upstream discharges can be treated more efficiently with a single downstream treatment facility when circumstances warrant. In addition, four commenters stated that we should address passive treatment systems as an option for treating discharges.

Nothing in the proposed or final rules restricts the type of treatment systems that permittees may use or where they may be located. Consequently, we find that there is no need to revise the rule in response to these comments.

Two commenters stated that we should consider allowing operators to bank credits for water treatment. As an example, operators could treat discharges that are not required by law and then use this treatment as a credit towards any other water treatment obligations that they may have.

This comment is beyond the scope of this rulemaking. We did not propose any changes regarding a permittee's water treatment obligations, nor do we have the authority to do so under SMCRA. Section 702(a) of the Act, 30 U.S.C. 1292(a), in essence provides that nothing in SMCRA (and by extrapolation its implementing regulations) may be construed as superseding, amending, modifying, or repealing the CWA and its implementing regulations.

Two commenters stated that the rule should specify that the trust fund or annuity can be funded over time by the permittee, in some cases over a period of several years.

Nothing in the final rule prohibits the funding of a trust fund or annuity over time. In addition, the preambles to both the proposed and final rules clearly state that we will allow a reasonable amount of time for permittees to fund trust funds and annuities. However, both the proposed and final rules do specify that any conventional bonds for the mine site may not be released until the trust fund or annuity is fully funded.

Two commenters indicated that the rule should be revised to clarify how the trust funds are used, such as allowing the operator to be reimbursed directly from the trust for all expenses of treatment and capital expenditures that are incurred. Additionally, five commenters indicated that the rule should provide for the periodic evaluation of the trust funds or

annuities to ensure that they have the appropriate amount of assets to treat AMD. These commenters also suggested that the rule state how underfunded or overfunded trusts will be adjusted.

Trust funds and annuities can have different disbursement requirements. Therefore, we are not modifying the rule to establish rigid disbursement criteria. We will specify the mechanics of disbursements from the trust fund or annuity in the formal trust agreements with the permittee.

With regard to comments pertaining to the periodic evaluation of the trust fund or annuity amounts, the formal agreement with the permittee will make the trust fund or annuity subject to the provisions of 30 CFR 800.15(a), which require periodic adjustment by the regulatory authority when the cost of future reclamation changes. That paragraph of the bonding regulations further allows the regulatory authority to specify periodic times or set a schedule for reevaluating and adjusting the bond amount. We will set such a schedule in the formal trust or annuity agreement. Therefore, we do not find it necessary to modify the Tennessee Federal program rules in the manner advocated by the commenters.

Four commenters stated that conventional SMCRA reclamation bonds should be released on a schedule according to existing regulations.

We agree, with one caveat. As stated above, the March 31, 1997, policy statement provides that no bond should be released for any permit with a long-term postmining pollutional discharge until there is adequate financial assurance for treatment of that discharge. Therefore, subsection 942.800(c)(9) of this final rule requires that a fully funded trust fund or annuity be in place before conventional bonds for the mine site may be released.

One commenter expressed concern that we intend to keep both a conventional reclamation bond and a trust fund or annuity in place for the same area. Two other commenters stated that it was their understanding that if treatment of a discharge was required before land reclamation was complete, we would require a conventional bond for land reclamation and a trust fund for the discharge.

In response, we note that § 942.800(c) of this final rule authorizes the use of trust funds and annuities only for the treatment of long-term postmining pollutional discharges and reclamation of the areas upon which discharge treatment systems and support facilities are located. Under the Tennessee Federal program regulations at 30 CFR 942.800, the permittee must post

conventional performance bonds for all other portions of the mine site and all other reclamation responsibilities. The final rule allows the release of all conventional bonds for a site with a postmining pollutional discharge once a fully funded trust fund or annuity is in place, provided the site otherwise qualifies for bond release under 30 CFR 800.40. There could be a period where both conventional bonds and a partially funded trust fund or annuity exist simultaneously for the same mine site. As examples, if a permittee is funding a trust fund or annuity over time, or if other areas of the mine do not qualify for release under 30 CFR 800.40, then both a conventional bond and a trust fund or annuity could cover the permit.

Three commenters requested that we clarify that the effluent limits of 40 CFR Part 434 are no longer applicable after termination of jurisdiction and bond release and when a trust fund or annuity is fully funded. In contrast, two other commenters expressed concern that treatment to meet the effluent limits in 40 CFR Part 434 may not be sufficient to protect classified uses designated for waters of the State of Tennessee.

In response, we note that, in keeping with section 702(a) of SMCRA, 30 U.S.C. 1292(a), we have no authority to modify discharge treatment standards established under the authority of the CWA or its implementing regulations. Issuance of a National Pollutant Discharge Elimination System (NPDES) permit for point-source discharges and establishment of effluent limits for those discharges is the responsibility of the agency charged with administering the CWA in Tennessee.

Five commenters requested that we add a provision requiring termination of OSM jurisdiction once a fully funded trust fund or annuity has been established. One of those commenters cited the language from the preamble to our termination of jurisdiction rule in support of his argument. 53 FR 44361–62 (November 2, 1988). The commenter asserted that adequate provisions could be made in the trust agreement to provide us with the ability to inspect and monitor the treatment process. Another commenter stated that we should make a distinction between those trust accounts that are posted as alternatives to surety bonds for active permits and those trust accounts that are established in accordance with the preamble to the termination of jurisdiction rule to meet the requirements for “a contract or other mechanism enforceable under other provisions of law” to provide financial assurance for long term treatment. This commenter suggested an approach

similar to that used by Pennsylvania where consent orders are enforceable agreements that do not depend on the regulatory authority retaining jurisdiction under SMCRA to oversee compliance. The commenter urged us to consider other alternatives to provide financial assurance for purposes of terminating jurisdiction.

For the reasons set forth below, we are not making the changes sought by the commenters. In response to a question about sites with postmining pollutional discharges, the preamble to our termination of jurisdiction rule at 30 CFR 700.11(d) discussed the possibility of full bond release (and hence termination of jurisdiction) if there are “assurances which provide through a contract or other mechanism enforceable under other provisions of law to provide, for example, long term treatment of an alternative water supply or acid discharge.” 53 FR 44361, November 2, 1988. We have not determined whether trust funds and annuities could be structured to qualify for full bond release and termination of jurisdiction. We do not find such a determination necessary because termination of jurisdiction is a discretionary action on the part of the regulatory authority. As provided in 30 CFR 700.11(d)(1), a “regulatory authority *may* terminate its jurisdiction under the regulatory program over the reclaimed site of a completed surface coal mining and reclamation operation, or increment thereof \* \* \* .” (emphasis added.)

We have elected not to exercise that discretion with respect to postmining pollutional discharges and associated treatment facilities and support areas. We believe that our decision to classify trust funds and annuities established for the long-term treatment of postmining pollutional discharges as an ABS and to retain jurisdiction over the treatment site is a superior means of achieving the purpose of SMCRA set forth at section 102(a) of the Act. 30 U.S.C. 1202(a) (“to protect society and the environment from the adverse effects of surface coal mining operations”). By retaining jurisdiction over the discharge and associated treatment and support facilities, we can monitor the site, its treatment needs, and the adequacy of the trust fund or annuity. Contrary to the commenters’ assertions, we would have no such authority if we terminated jurisdiction. Similarly, because we have classified trust funds and annuities as an ABS, we have authority under the bond adjustment provisions of 30 CFR 800.15(a) to order the permittee to contribute more funds if the assets of the trust fund or annuity require

adjustment to reflect changes in discharge quality or quantity or investment performance or projections. We could not do so if we terminated jurisdiction. Indeed, in the absence of complaints from the public, we probably would not be aware of the situation because we would have no inspection or monitoring authority.

Our decision to retain jurisdiction and classify trust funds and annuities as an ABS avoids these problems. However, nothing in this rule would prohibit us from terminating jurisdiction over the portion of the mine site that is not involved with treatment of the discharge once the requirements of § 942.800(c)(9) are met and bond is fully released on that portion of the mine site.

One commenter suggested that the proposed rule should not be applied retroactively, but prospectively only. The commenter reasoned there is currently no requirement for bond or other financial assurances for treatment of AMD. The commenter cited *Bowen v. Georgetown University Hospital*, 488 U.S. 204 (1988) and *NMA v. DOI*, 177 F. 3d 1 (D.C. Cir. 1999), for the proposition that retroactive application of rulemaking is prohibited unless specifically authorized by Congress.

As explained at length in the preamble to both this rule and the proposed rule, we disagree with the commenter's assertion that there is no existing Federal regulation requiring bond or financial assurances for treatment of postmining pollutional discharges. We interpret the 1983 changes to the Federal bonding regulations in 30 CFR Part 800 as confirming that requirement. The final rule that we are adopting today does not alter that requirement or otherwise modify the national bonding regulations. Instead, it merely provides permittees in Tennessee with the option of replacing conventional bonds with trust funds or annuities as a means of satisfying the bonding requirements for treatment of long-term postmining pollutional discharges.

Five commenters stated that the rule must specify standards for termination of the trust fund or annuity, such as requiring that the untreated discharge meet Tennessee water quality standards or approved alternative standards, thus demonstrating that no further treatment is necessary.

In response, we note that § 942.800(c)(5) of this rule provides that, apart from replacement with a different financial assurance or administrative necessity, termination may only occur if we determine "that no further treatment or other reclamation measures are necessary." This rule language should

be sufficient to ensure that premature termination does not occur. The formal trust fund or annuity agreement will contain specific treatment standards for each discharge, which will reflect the standards in the NPDES permit. Under section 702(a) of SMCRA, 30 U.S.C. 1292, we have no authority to deviate from those standards. The formal agreement also will specify the steps that must be taken to demonstrate that treatment is no longer needed, which may vary with site conditions and the nature of the discharge.

Two commenters stated that the proposed rule failed to address formal participation by the permittee. According to the commenters, the rule should require that we provide notice to the permittee under the permit revision provisions of section 511(c) of SMCRA, 30 U.S.C. 1261(c), when we determine that a long-term postmining pollutional discharge exists.

We find that no rule change is needed in response to these comments. Whenever an unanticipated postmining pollutional discharge develops, we will order the permittee to revise the reclamation plan to address the discharge. In those cases, the permit revision notification requirements of the Act and regulations will apply.

Two commenters noted that because the Tennessee Department of Environment and Conservation (TDEC) has primary authority to regulate discharges to waters of Tennessee under the CWA as well as State law, there is overlapping jurisdiction between OSM and TDEC. The commenters found the rule to be unclear on how the proposed trust funds would mesh with TDEC's responsibilities. The commenters requested that decisions regarding the terms of the trust be made jointly with TDEC and OSM. Specifically, the commenters request that the proposed rule be changed to indicate that TDEC's approval is needed for the determinations made under our proposal at § 942.800(b)(4)(i), (v), (vi), and (viii) (now designated as § 942.800(c)(1), (5), (6), and (8)).

We can find no reason to modify the rule in the manner that the commenters advocate. Discharge treatment standards will be established based upon the permits issued by TDEC as the CWA authority. Under section 702(a) of SMCRA, 30 U.S.C. 1292(a), we have no authority to establish different treatment standards or requirements for point-source discharges regulated under the CWA. Conversely, TDEC has no jurisdiction over the bonding of surface coal mining operations in Tennessee under SMCRA. Therefore, there is no need to seek TDEC approval for actions

related to trust funds and annuities, which we are approving as an ABS under section 509(c) of SMCRA, 30 U.S.C. 1259(c).

Another commenter expressed concerns about the workload that the rule would impose on the Tennessee's CWA authority and the State's ability to meet those demands. As we explained in the preceding paragraph, this rule places no demands upon Tennessee's CWA authority.

Two commenters stated that the rule appears to be internally inconsistent about who is responsible for treatment of pollutional discharges and how the funds are to be released for treatment. The commenters point out that proposed 30 CFR 942.800(b)(4)(vi) allows funds from the trust to be released to the permittee, while proposed 30 CFR 942.800(b)(4)(viii) provided that the trust fund or annuity must guarantee that moneys are available for OSM to pay for treatment. Two commenters also stated that the rule should specify that the permittee remains liable for the costs of the long-term treatment. According to the commenters, this clarification would diminish any incentive to underfund the trust.

We understand why the commenters described a potential internal inconsistency, but we do not agree that proposed subsections (b)(4)(vi) and (viii) (final subparagraphs (c)(6) and (8)) are, in fact, inconsistent. However, we have made minor revisions to address the commenters' concern. Final subparagraph (c)(6) allows release of funds for treatment purposes (but only according to a set schedule or when authorized by OSM), while final subparagraph (c)(8) requires that the trust fund or annuity be structured in a manner that guarantees that sufficient funds will be available for treatment and reclamation needs. We removed the phrase "to the permittee" from (c)(6) (proposed as § 942.800(b)(4)(vi)) so now this provision requires our written authorization for release of funds from the trust fund or annuity to any entity. We also removed the unnecessary reference to OSM in subparagraph (c)(8) that appeared in the proposed rule.

Nothing in this rule alters a permittee's responsibility for the treatment of discharges under SMCRA or the Federal regulations. Permittees are responsible for reclamation obligations under their permits, including treatment of discharges, regardless of whether those obligations are secured by a bond, a trust fund, or an annuity. In the event the permittee defaults on those reclamation obligations, we will use the bond, trust

fund, or annuity to fulfill the reclamation obligation. Therefore, there is no incentive for the trust to be underfunded.

Two commenters inquired whether OSM, Tennessee or the trustee would be responsible for complying with NPDES permit provisions if the permittee failed to do so. In response, we note that the formal trust fund or annuity agreement will set forth the procedure to be followed in the event that the permittee does not fulfill its obligations, which, at a minimum, will include ensuring that funds are available to continue treatment of the discharge. That is one of the purposes of establishing a trust fund or annuity, which is structured to provide an income stream and continuation of treatment in the event the permittee fails to fulfill its treatment obligations. If we are required to forfeit a trust fund or annuity, we are acting in our capacity as the regulatory authority. However, that is the extent of our responsibility under SMCRA and these rules. We are not the permittee, and we do not become the permittee when the permittee defaults on reclamation obligations, which means that we do not assume the permittee's NPDES compliance duties. The State of Tennessee is not a party to these trust funds and annuities, so it would not have any NPDES compliance duties if the permittee defaults on reclamation obligations.

Two commenters asserted that OSM should consult with the Environmental Protection Agency (EPA) with regard to the proposed rule because EPA has designated coal mining as a primary industry. The commenters stated that another reason for consulting with EPA is that EPA must approve all NPDES permits for coal mining prior to issuance by TDEC.

This rule pertains only to the means by which permittees may comply with the bonding requirements of SMCRA and the Tennessee Federal regulatory program with respect to funding the treatment of postmining pollutional discharges. EPA has no jurisdiction over performance bond requirements under SMCRA, nor does SMCRA require consultation with EPA on regulations concerning those requirements.

Two commenters suggested that the wording of the proposed rule might unintentionally create a broader exception from bonding requirements than we intended. The commenters noted that 30 CFR 942.800(a) states that the general rules for bond and insurance requirements apply "except as provided in paragraph (b) of this section \* \* \* ." The commenters assert that the addition of proposed subparagraph (b)(4) (now

designated as paragraph (c)) would expand the situations in which the bonding requirements do not apply and appears to exempt the entire mine site from the bonding requirements, rather than just the pollutional discharge. The commenters suggested moving our proposed requirements for trust funds and annuities from subparagraph (b)(4) to a new paragraph (c) and modifying the first two sentences to read, "If OSM makes a determination that a site will need to have long-term treatment of pollutional discharges, it may require the permittee to establish a trust fund to guarantee such treatment will be provided as long as it is necessary."

The commenters raise a potentially valid point, in part. All three subparagraphs of existing paragraph (b) refer to the transition from the defunct Tennessee State regulatory program to the current Federal regulatory program for Tennessee. Consequently, the provisions of proposed 30 CFR 942.800(b)(4) do not logically belong in paragraph (b). Therefore, in the final rule, we are codifying proposed subparagraph (b)(4) as paragraph (c) and slightly revising paragraph (a) to incorporate the new paragraph (c). We are also adding language that clarifies that the provisions of paragraph (c) may be used in lieu of posting one of the forms of conventional bonds listed in 30 CFR 800.12. We have revised proposed § 942.800(b)(4)(viii) (now § 942.800(c)(8)) to avoid any possibility that paragraph (c) could be construed as applying to the entire mine site. We also revised proposed § 942.800(b)(4)(ix) (now § 942.800(c)(9)) to make it clear that the treatment and reclamation obligation on the portion of the mine site associated with treatment of the discharges remains secured under the trust fund or annuity in the event conventional bonds for the permit are released. These changes should remedy the potential problem identified by the commenters.

One commenter requested that we add a provision to prescribe a process for transferring responsibilities under a trust agreement to another permittee, a landowner, or a lessee. The commenter stated that the provisions of 30 CFR 942.774 regarding revision, renewal and transfer, assignment, or sale of permit rights do not cover or relate to situations where another permittee, the landowner, or a subsequent lessee desires to assume the permittee's responsibilities under an existing trust agreement.

We do not interpret SMCRA or our regulations as allowing the transfer of reclamation liability from the permittee to other persons by any mechanism

other than transfer of the permit itself in accordance with the process established at 30 CFR 774.17 for the transfer, assignment or sale of permit rights. Paragraphs (b)(3) and (d)(2) of that section require that any successor to a permit submit a bond or other guarantee or obtain the bond coverage of the original permittee before the regulatory authority can approve the transfer, assignment, or sale of the permit. Those regulations also apply in situations in which the bond takes the form of trust funds and annuities approved as an ABS. However, if a landowner, lessee, or another permittee wishes to assume the permittee's responsibilities under the trust fund or annuity agreement, nothing in the rule that we are adopting today would prohibit the permittee and that person from entering into a contractual agreement separate from the trust or annuity agreement, although ultimate responsibility would still reside with the permittee in accordance with the terms of the trust or annuity document.

A commenter suggested that we might want to require permittees to provide rights to the real property needed to facilitate water treatment as part of the trust. According to the commenter, the rights to real property may be necessary to ensure successful treatment of discharges.

The acquisition of property rights may or may not be required in every trust situation. In general, the rights that allow mining provide access to the site for reclamation. In the event a right-of-entry issue arises, it can be addressed in the individual trust agreement.

One commenter stated that trust funds are unlikely to generate enough capital to meet all SMCRA reclamation requirements.

We agree that there may be some situations in which the permittee is unable to obtain the capital needed to establish a trust fund or annuity. However, that fact should not operate to preclude the establishment of trust funds or annuities in situations in which the permittee can obtain the necessary capital. Furthermore, trust funds and annuities are not intended to meet all SMCRA reclamation requirements as this commenter suggests. Rather, we are approving the use of these mechanisms as a means of providing financial assurance for the long-term treatment of postmining pollutional discharges and reclamation of associated facilities. The regulations continue to require the posting of a conventional bond for land reclamation on the remainder of the site.

One commenter noted that the adequacy of the bond is more important than the bonding instrument.

We agree that adequacy of the bond is important, but we cannot discount the importance of the instrument to secure long-term treatment of postmining pollutional discharges. An income-producing financial instrument, such as a trust fund or annuity, is a more appropriate method of funding treatment of these discharges than a conventional bond.

One commenter stated that we need to increase bonds because bond forfeitures have allowed mining companies to avoid their reclamation obligations and have placed those obligations on OSM. The commenter argued that permittees should post both bonds and annuities because annuities based on stock market performance can shrink as well as grow. Thus, if the annuities shrink, they may not be funded sufficiently to provide the necessary treatment.

We disagree that permittees should be required to post both conventional bonds and trust funds or annuities for the same reclamation liability. Under section 509 of SMCRA, 30 U.S.C. 1259, and 30 CFR 800.14, we have no basis for requiring bond amounts in excess of the amount that we determine may reasonably be needed if the permittee defaults on reclamation obligations and we need to contract with a third party to complete the reclamation plan. We recognize that investment performance is subject to fluctuations that may adversely impact the assets of trust funds and annuities. Consequently, like Pennsylvania, we will structure trust funds and annuities to maintain a cushion against those times when investment performance does not approach the target rate. In addition, as authorized by 30 CFR 800.15(a) and incorporated by the trust documents, we will conduct periodic reviews of trust funds and annuities and require that the permittee make additional contributions if the cushion proves to be an inadequate safeguard against market fluctuations.

*B. Sections 942.816(f)(3) and 942.817(e)(3): Revegetation Success Standards What Are the Revisions to §§ 942.816(f)(3) and 942.817(e)(3)*

Of the 56 commenters submitting comments on the proposed revisions to 30 CFR 942.816(f)(3) and 942.817(e)(3), twenty-three were from environmental groups, one was from an association representing the coal industry, two were from coal companies, two were from government agencies, one was from an association representing mining states, and 27 did not provide an affiliation.

While six of the comments were favorable, fifty commenters were opposed to what the commenters viewed as a weakening of the revegetation success standards of the Tennessee Federal program.

Numerous commenters expressed their opposition to changes in the shrub and tree stocking standards, even though the proposed rules did not alter the existing tree and shrub stocking standards under the Tennessee Federal program. The modified revegetation requirements that we proposed on April 6, 2006, apply only to vegetative ground cover on sites with a postmining land use requiring the planting of trees, *i.e.*, wildlife habitat, undeveloped land, recreation, or forestry. The regulations at 30 CFR 942.816(f)(3)(i) and (ii) and 942.817(e)(3)(i) and (ii), which address the stocking levels of woody plants for those postmining land uses, are not affected by these changes.

Twenty-six commenters expressed concern that the proposed rules would “waive” the revegetation requirements for postmining land uses of wildlife habitat, undeveloped land, recreation, or forestry. The commenters generally suggest that we specify minimal planting requirements for trees and shrubs, require that trees and shrub plantings be species native to the area, and require that functional tests measuring the number of trees and shrubs that must survive be conducted years after planting and prior to any bond release.

As we have noted, the only changes regarding revegetation in this rulemaking are the elimination of the 80% ground cover requirement from 30 CFR 942.816(f)(3) and 942.817(e)(3) for postmining land uses of wildlife habitat, undeveloped land, recreation, or forestry. In addition, we are eliminating the bare area restriction of 30 CFR 942.816(f)(4) and 942.817(e)(4) for those lands with a forestry-related postmining land use.

We did not propose to modify the tree and shrub stocking and planting arrangement requirements of the Tennessee Federal program at §§ 942.816(f)(3)(i)–(ii) and 942.817(e)(3)(i)–(ii). Therefore, comments regarding tree and shrub planting standards are outside the scope of this rulemaking, which means we will not discuss them.

Additionally, the elimination of the 80% vegetative ground cover standard does not constitute a “waiver” of the ground cover vegetation success standards. We are retaining the ground cover success standards of the Tennessee Federal program at 30 CFR 942.816(f)(3)(iii) and 30 CFR

942.817(e)(3)(iii), which provide that vegetative ground cover must not be less than that required to achieve the postmining land use. That requirement is the same as the one found in our national regulations at 30 CFR 816.116(b)(3)(iii) and 817.116(b)(3)(iii) regarding vegetative ground cover success standards for areas with postmining land uses requiring the planting of trees and shrubs. Removing the 80% vegetative ground cover requirement from 30 CFR 942.816(f)(3) and 30 CFR 942.817(e)(3) is consistent with our national regulations at 816.116(b)(3)(iii) and 817.116(b)(3)(iii), which do not require a fixed percentage of vegetative ground cover. Instead, the national rules, and now the Tennessee Federal program rules, provide that, to achieve revegetation success, vegetative ground cover must not be less than that required to achieve the approved postmining land use.

One commenter argued that the scientific studies cited in the proposed rule to justify elimination of the 80% vegetative ground cover requirement mistakenly identify ground cover density as the cause of forest regeneration failure. According to the commenter, the altered hydrology and soil conditions of reclaimed mine sites, not excessive ground cover, prevent long-term survival of trees. The commenter notes that any area receiving sufficient precipitation in eastern Tennessee will proceed by secondary succession from grassland to forest regardless of the amount of herbaceous ground cover. However, the commenter also asserts that mined mountaintops, which have no forested slopes above them to provide a seed source, would require human seeding or tree planting.

The research we cited does not identify vegetative ground cover density alone as the cause of tree growth failure and mortality, but rather identifies it as a significant contributing factor. Because traditional mine reclamation typically includes compacting surface soil materials, application of fertilizers and other soil amendments at high rates, and then seeding the site with quick-growing, aggressive grasses and legumes, the resulting vegetative ground cover is so dense that most tree seedlings and newly planted trees cannot compete effectively for nutrients, water and sunlight. In addition, the dense herbaceous cover provides favorable habitat for small mammals that eat tree seeds and damage tree seedlings and saplings.

We agree with the commenter that trees will eventually volunteer on mine sites, but dense vegetative ground covers will inhibit their growth and

increase mortality. Our objective is to establish, as quickly as practicable, vigorous and healthy forests of native species on reclaimed mine lands. Our removal of the 80% ground cover success standard eliminates one of the regulatory barriers that we have determined inhibits the reestablishment of high-quality hardwood forests.

In addition to reducing competition from aggressive herbaceous ground covers, loosely graded surface soil materials increase water infiltration and make more water available for tree growth as well as providing a favorable medium for root growth and development. While we agree with the commenter's views on how hydrology and soil conditions affect tree growth on conventionally reclaimed mines, mine sites with reduced compaction and less aggressive ground cover are more likely to overcome these obstacles.

One commenter agreed that some types of herbaceous ground covers inhibit tree seedling growth less than others do. However, the commenter stated that, rather than relaxing vegetative ground cover standards, we should study the types of ground covers and specify which herbaceous "tree-friendly" ground covers should be used to balance erosion control and tree establishment.

As previously discussed in this preamble, we have found that the 80% ground cover success requirement is not only in conflict with tree establishment and regeneration, it also interferes with the statutory requirement to establish a diverse, effective, permanent vegetative cover comprised of species native to the area. In addition, in most cases, it is not needed to control erosion if the FRA is followed. Our rules at 30 CFR 816.111(a)(4) and 817.111(a)(4) continue to provide that vegetative ground cover must be sufficient to control erosion and to maintain soil stability. We will continue to encourage the use of those types of ground cover that achieve that requirement without substantially inhibiting the growth, survival, and regeneration of trees and shrubs.

One commenter expressed concern that the proposed rule language was vague and that we did not provide substitute requirements for the 80% ground cover rule or the bare area restrictions. The commenter suggested that we incorporate guidelines for tree planting or monitoring of natural succession to achieve tree coverage goals before bond release. The commenter also requested that we include specific runoff-monitoring procedures. Other commenters stated that the regulations should specify the number of trees, shrubs, and other

vegetation that must be planted on reclaimed mine sites, including the number of species to be planted and the survival rate by which success will be judged.

The existing regulations for the Tennessee Federal program at 30 CFR 942.816(f)(3)(i) and 942.817(e)(3)(i), which were not affected by this rulemaking, provide that we must specify stocking levels and planting arrangements on the basis of local and regional conditions after consultation with the State agencies responsible for the administration of forestry and wildlife programs. Subparagraph (ii) of those rules contains standards for evaluating the success of tree and shrub growth and survival. Our surface water monitoring requirements are found at 30 CFR 780.21(j), 784.14(i), 816.41(e), and 817.41(e). We do not agree that separate runoff monitoring is needed to evaluate the requirement that ground cover be adequate to control erosion. Visual inspection of the site for rills and gullies will suffice.

A commenter characterized the rule as promoting "patchwork" revegetation upon a larger-scale mining site. The commenter expresses a belief that we should focus on reforestation of the entire mine site as was intended by SMCRA.

First, SMCRA does not allow us to require that mined lands be returned to forest conditions. Section 515(b)(2), 30 U.S.C. 1265(b)(2), requires that mined lands be reclaimed to a condition capable of supporting the uses that they were capable of supporting prior to mining or to higher or better uses. Consequently, the regulations that we are adopting in this rulemaking only apply to mine sites with a postmining land use requiring the planting of trees and shrubs. For those mine sites, the rule eliminates the arbitrary 80% ground cover requirement and the limitation on the maximum amount of bare area. The revised regulations seek to encourage tree growth and survival by limiting competition from excessive herbaceous ground cover. Research and an examination of reclaimed mine sites has demonstrated that competition from herbaceous ground cover, along with excessive soil compaction during backfilling, regrading, and topsoiling, has resulted in the creation of grasslands with few trees on most reclaimed mine sites. We believe that adoption of this rule, which removes requirements that make it difficult to establish woody plants, will increase the probability that permittees will return mined lands to forestry-related postmining land uses.

In Tennessee, most mine sites were originally forested prior to mining and the surrounding land is, for the most part, still forested. Conventional reclamation has resulted in forest fragmentation and the "patchwork" revegetation that is the subject of the commenter's concern. We anticipate that adoption of the rule changes discussed in this preamble will lessen the occurrence of "patchwork" revegetation by creating more favorable conditions in which mine sites can and will be returned to healthy, productive forests consistent with surrounding lands.

One commenter stated that we have not identified how past hardwood tree-planting failures can be avoided in the future.

We disagree with this comment. In our April 6, 2006, notice, we identified the major factors that negatively affect tree growth on reclaimed mine lands, such as compaction and competition from grasses. We also explained that forestry researchers have agreed that productive forestland can best be created on reclaimed mine land by using the FRA. Specific comments regarding the FRA are discussed under the General Comments section below.

A commenter expressed concern that implementation and enforcement of compaction requirements would no longer be a priority on reclaimed landforms where compaction is necessary to stabilize the backfilled spoils or to prevent settlement-related highwall exposure.

The regulations we are approving in this rulemaking do not replace or supersede any existing stability or highwall elimination requirements. Mined-out areas must still be backfilled in a manner that meets all stability and highwall elimination requirements.

One commenter stated that the proposed rule changes fail to provide information on tree-compatible groundcover species and do not require the use of low levels of nitrogen fertilizer (to avoid stimulating overly lush herbaceous vegetation).

We believe that these details are best addressed through the permit application submission and review process rather than in our regulations.

A commenter stated that if OSM intends to leave all or part of mine sites devoid of vegetation, the reclamation plan should specify how the resultant increase in sediment will be controlled. Alternatively, we should produce credible models demonstrating that an increase in sedimentation will not occur. According to the commenter, failure to do so will cause pollution to Tennessee's waters.

As discussed earlier in this preamble, non-compacted mine soils have higher infiltration rates and erode less than graded soils, which generally translates to lower runoff rates. Thus, when using the FRA, less ground cover is needed to prevent erosion and protect water quality. Regardless, nothing in the rules that we are adopting today supersedes the existing regulations at 30 CFR 816.45(a) and 817.45(a), which require the use of appropriate sediment control measures that prevent, to the extent possible, using the best technology currently available, additional contributions of sediment to streamflow or to runoff outside the permit area. Also, under 30 CFR 816.42 and 817.42, point-source discharges must comply with applicable State or Federal effluent limitations.

Many commenters referred to removal of the 80% requirement as a “waiver” of revegetation ground cover success standards. As we noted earlier, we are not promulgating regulations that create a “waiver” of revegetation ground cover success standards. Instead, we are revising the vegetative ground cover success standards for mine sites where the postmining land uses are related to forestry. These revisions will support the growth and survivability of trees on those postmining land uses. The rule that we are adopting today does not alter the existing ground cover requirements in our revegetation rules at 30 CFR 816.111(a)(3), 817.111(a)(3), 942.816(f)(3)(iii), and 942.817(e)(3)(iii), which remain in effect.

Several commenters mentioned that we should ensure that native trees, shrubs, and other vegetation were planted to help the revegetation of mine sites. For example, one commenter recommended that we require revegetation using native grasses, forbs, shrubs, and trees because these would likely not be as competitive with native trees and they would have beneficial effects on wildlife. Another commenter requested that we specify in the regulations that the permittee must plant a diverse mix of trees, shrubs, and herbs native to the area to qualify for the new revegetation requirements.

Our regulations at 30 CFR 816.111 and 817.111 provide that the species planted must be native to the area and that introduced species are only allowed where necessary to achieve the approved postmining land use when authorized by the regulatory authority. Therefore, it would be redundant to include a requirement for native species selection as part of this rulemaking.

One commenter asked whether the removal of the 80% ground cover standard would apply to existing sites

where the fill was compacted and the site could not meet the prior 80% ground cover success standard or whether it would only apply to new mines that are permitted after the rule is in effect.

The revised regulations will apply to existing or future permits approved with postmining land uses of wildlife habitat, undeveloped land, recreation, or forestry, but existing mines must conform to the requirements in their reclamation plans. If an existing permit's reclamation plan incorporates or adopts the 80% ground cover success standard or limits the amount of bare area, the permittee must either comply with the existing permit requirements or seek a permit revision under 30 CFR 942.774 to modify those requirements.

*C. Sections 942.816(f)(4) and 942.817(e)(4): Revegetation Success Standards—Bare Area Restrictions*

We received nine comments on our proposal to exempt mine sites reclaimed for the purposes of wildlife habitat, undeveloped land, recreation, or forestry from the bare area limitation requirements of 30 CFR 942.816(f)(4) and 942.817(e)(4). Seven of these comments were unfavorable and two comments were favorable. Of the nine commenters, three were from environmental groups, three were from academic institutions, one was from an association representing mining States, one was from a government agency, and one was from industry. The seven unfavorable comments were primarily concerned about the potential for erosion from the bare areas that the revised rules allow on reclaimed mine sites. The commenters suggested that eliminating this standard for mine sites reclaimed for forestry-related postmining land uses would allow permittees to completely forego revegetation on mine sites.

We exempted mine sites with postmining land uses related to forestry from the bare area limitation requirements of §§ 942.816(f)(4) and 942.817(e)(4) because portions of mine sites reclaimed using the FRA may have sparse vegetative ground cover. These potential bare areas are desirable because they allow planted trees to grow without the threat of competition from aggressive ground covers. Bare areas also allow native grasses, shrubs, and trees from surrounding areas to voluntarily reseed the reclaimed mine site.

With respect to the commenters' concerns over increased erosion and sedimentation, our regulations will not allow reclaimed mine sites to be completely devoid of vegetation. While

the change we are making as part of this rulemaking may result in some portions of mine sites without vegetation, the reclamation plan and the permittee will still have to comply with all existing regulations, including 30 CFR 816.111(a)(4) and 817.111(a)(4), which state that permittees must establish a vegetative cover that is capable of stabilizing the soil surface from erosion; 30 CFR 816.116(a)(3) and 817.116(a)(3), which require that the extent of cover be at least equal in extent of cover to the natural vegetation of the area, and 30 CFR 816.95(a) and 817.95(a), which require control of erosion on exposed surfaces.

Additionally, our bond release regulations at 30 CFR 800.40(c)(2) provide that “[n]o part of the bond or deposit shall be released under this paragraph so long as the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area in excess of the requirements set by section 515(b)(1) of the Act \* \* \*.”

One commenter noted that the proposed rule would allow bare areas not just on sites developed for forestry, but also for wildlife habitat, undeveloped land, and recreation. According to the commenter, it is not clear that trees would be used in the latter three land uses. Consequently, the commenter recommended that all three of those uses be deleted from the regulations.

We disagree with the commenter's premise that trees would not be a part of the reclamation plan for postmining land uses of wildlife habitat, undeveloped land, and recreation. By including these land uses in 30 CFR 942.816(f)(3) and 942.817(e)(3), we are requiring that the revegetation success standards for those land uses be based primarily on the establishment of trees and shrubs. In addition, our regulations at 30 CFR 816.111 and 817.111 require, among other things, the establishment of a diverse, effective, permanent vegetative cover that is at least equal in extent of cover to the natural vegetation of the area and capable of stabilizing the soil surface from erosion. Those requirements apply to all mined lands regardless of the postmining land use.

One commenter recommended that the exemption from the restriction on bare areas be limited to those lands where trees or shrubs will ultimately provide the majority of the ground cover.

The change in our regulations removing the bare area restriction applies only to those postmining mine uses for which we anticipate that trees and shrubs will provide the majority of

the ground cover. Therefore, there is no need to modify the rule as the commenter suggested.

Our experience has shown that plants and trees will voluntarily germinate on any bare areas. In fact, sites mined prior to the passage of the Act before revegetation requirements were in effect have reverted to forest from volunteer reseeding. Consequently, we anticipate that bare areas will encourage natural succession, which will assist in fulfilling the requirement of § 515(b)(19) of the Act, 30 U.S.C. 1265(b)(19), to establish a diverse, effective, permanent vegetative cover of the seasonal variety native to the land to be affected and capable of self-regeneration and plant succession.

#### *D. General Comments on the Proposed Revisions to the Tennessee Revegetation Requirements*

We received numerous comments that did not address the specific changes to the revegetation portion of the Tennessee Federal program that we set forth in our April 6, 2006, proposed rule. Many of these comments focused on aspects of FRA other than the ground cover change contained in this rulemaking. While these comments are not directly responsive to this rulemaking, we have decided to respond.

The use of the FRA is voluntary in Tennessee. However, through the Appalachian Regional Reforestation Initiative, we are encouraging the use of the FRA in reclaiming mine sites that include planting trees. We believe that as more operators become aware of the effectiveness of the FRA, an increasing number of operators will use the method to successfully restore forests.

Several commenters stated that we are implementing the FRA without providing any specifics about how it should be considered in the reclamation plan, or which standards apply to lands reclaimed under the FRA. These commenters requested that the rule include such details as the amount and type of grading and compaction, the type and number of trees species planted, which sites or types of mines would qualify for the FRA, and other criteria the commenters deemed necessary for successful implementation of the FRA.

For example, one commenter generally supported the attempt to promote reforestation on reclaimed mine sites, but expressed concern that we were revising our rules to adopt the FRA. The commenter pointed out that we neither defined the FRA in the rule nor defined what constitutes successful implementation of the FRA as a mine

reclamation practice. The commenter asserted that the rule should set forth performance standards that must be attained in order to determine if the FRA was implemented successfully. The commenter also suggested that we establish performance standards that include a "minimum stand density" of trees and shrubs growing with sufficient vigor to demonstrate long-term survival and regeneration. Furthermore, the commenter opined that the bond release term for forestry-related reclamation should be increased to allow more time to determine whether the reclaimed mine site has met the performance standards.

The purpose of this rulemaking is to remove regulatory barriers to effective tree establishment and growth for those areas where trees will be planted as part of the reclamation. With the exception of the changes being made by this final rule, the reclamation practices advocated by the FRA can be implemented within existing regulations. Whether the other aspects of FRA are or are not implemented as a part of tree planting is beyond the scope of this rulemaking since those other aspects are within the existing performance standards related to backfilling, grading, and revegetation. For example, the Tennessee Federal program at 30 CFR 942.816(f)(3)(i) and (ii) and 30 CFR 942.817(e)(3)(i) and (ii) already provides that revegetation success standards for postmining land uses involving woody plants must include stocking and planting arrangement requirements. Additionally, section 515(b)(20) of SMCRA, 30 U.S.C. 1265(b)(20), establishes the revegetation responsibility period at five years after the last year of augmented seeding, fertilizing, irrigation, or other work (excluding normal husbandry practices).

Several commenters noted that the FRA and the changes made by this rulemaking should be conducted first as a pilot program. Specifically, one commenter stated that this rule should be considered experimental and provisionally implemented only on a predetermined, relatively small area until its feasibility and efficacy can be documented. Similarly, another commenter stated that permits should only be granted when a permittee can demonstrate that the proposed reclamation techniques have proven successful on mine sites with similar characteristics. In addition, another commenter suggested that we should reevaluate whether any mine can comply with SMCRA's revegetation requirements rather than embark upon another unproven experiment. The

commenter noted that some permittees have previously attempted reforestation of postmining land and have either failed or met with something far less than success.

The benefits of reduced ground cover for tree seedling establishment and growth have been demonstrated by research conducted by major universities throughout the United States. In further support of our conclusion, one commenter submitted additional research in support of the FRA's techniques. The research provided by the commenter indicates that native trees often show poor growth in areas with heavy ground cover and that the use of less-competitive native grasses can aid in forest succession.

Various commenters expressed their opinions regarding aspects of the potential effects of reduced compaction. Some commenters expressed concerns that the language of the rule did not address compaction and grading and suggested that we promulgate new regulations specific to the reduced grading and compaction of the soil under the FRA. One commenter asserted that the preamble to our proposed rule created a hidden rule setting forth guidance for grading and reduced compaction of soil on mine sites.

Our revision to these rules only removes regulatory barriers that impede successful establishment of trees. While minimizing compaction is a critical part of successful forest restoration, there is sufficient flexibility within existing rules to provide for it. Our existing rules provide specific standards addressing erosion control, sedimentation, water quality, and other related issues that are not affected by this rulemaking. Further, the rule promulgated here is designed to address variations in compaction. As compaction is reduced, infiltration is increased and runoff is reduced. This rule requires that ground cover in areas where trees are planted be limited to that necessary to control erosion and support the postmining land use. Therefore, where compaction and runoff are high, more ground cover will be required. Where compaction and runoff are low, less ground cover will be required.

Some commenters expressed concerns that loose grading of the topsoil or topsoil substitute would cause erosion and sedimentation, especially on steep slopes. One commenter, for example, expressed concerns that the rule change would allow placement of loose or uncompacted soil on mine sites with steep slopes, which would cause high levels of erosion. The commenter noted that nothing in the rule requires mine operators to increase the capacity of

erosion and sedimentation controls to accommodate the increased sedimentation.

Again, there is nothing in this rule that modifies existing regulatory requirements related to compaction and the rule continues to require ground cover sufficient to control erosion.

Another commenter expressed concerns about the effects that sedimentation from mining will have on populations of rare and endangered species in streams. In response, we note that this rule still requires control of erosion and that nothing in this rule alters our regulations concerning protection of fish and wildlife, including threatened and endangered species. See 30 CFR 780.16, 784.21, 816.97 and 817.97. All operations must continue to comply with those regulations. Furthermore, this rule will promote more rapid restoration of forest cover on mined lands, which will benefit stream quality and associated wildlife.

Another commenter suggested that the provisions of the FRA for loose grading of topsoil or topsoil substitutes would lead to more water infiltration into reclaimed backfill areas and that excessive water in the backfill would contribute to landslides.

In response, we again note that this rule does not alter existing stability requirements, including the regulations related to backfilling and grading. For example, 30 CFR 816.102(c) requires spoils to be compacted where advisable to ensure stability.

One commenter expressed concerns about the difference in sedimentation between tree-only plantings versus plantings with a more diverse cover. In addition, the commenter questioned how these differences in cover related to sequestering nutrients, controlling flooding, capturing water for recharging aquifers, and developing fertile soils.

Our changes to the ground cover standards in the Tennessee Federal program do not alter any regulations regarding soil erosion. The regulations at 30 CFR 816.45(a) and 30 CFR 817.45(a) require the use of appropriate sediment control measures to prevent, to the extent possible, additional contributions of suspended solids to streamflow or to runoff outside the permit area. Additionally, the regulations at 30 CFR 816.111(a)(4) and 30 CFR 817.111(a)(4) require all permittees to establish a vegetative cover on all reclaimed areas that is capable of stabilizing the soil surface from erosion. All Tennessee mine sites must still comply with these regulations.

One commenter also suggested that permittees might not adopt the FRA because they would have to dispose of the extra spoil resulting from not compacting soil materials. Again, there is nothing in this rulemaking that alters backfilling or compaction standards. This rulemaking is limited to the ground cover aspect of FRA.

Several commenters suggested types of materials that could be used to provide or enhance a tree-friendly growing medium. For example, one commenter recommended that we require permittees to gather fallen leaves from urban areas to amend soils on reclaimed surface mines. Another commenter advocated the use of biosolids for reclaiming mine lands. The commenter noted that biosolids counteract the sulfur and other pyrite and acidic materials in mine spoils, bring the pH back to neutral, and provide large amounts of organic materials. Another commenter advocated requiring permittees to improve mine soils.

We acknowledge that the soil supplements advocated by the commenters may have value, but these comments are outside the scope of this rulemaking.

One commenter advocated saving all the topsoil or organic matter on mine sites. In response, we note that the Federal regulations at 30 CFR 816.22 and 30 CFR 817.22 already require the salvage of topsoil, including the organic layer, unless the regulatory authority approves the use of a topsoil substitute that is equal to or more suitable for sustaining vegetation than the original topsoil.

One commenter requested increased permittee maintenance of sites after planting because animals and landslides destroy trees and shrubs.

Our existing regulations provide sufficient safeguards to ensure the stability of the land and the adequacy of revegetation on reclaimed mine sites. At 30 CFR 942.816(f)(3) and 942.817(e)(3), the Tennessee Federal program provides success standards for trees and shrubs on sites with a postmining land use of wildlife habitat, undeveloped land, recreation, or forestry. These regulations require that at least 80% of trees and shrubs have been in place for at least three growing seasons and that the trees and shrubs must be healthy. According to those regulations, no trees and shrubs in place for less than two growing seasons may be counted in determining stocking adequacy. Those regulations also provide that vegetative ground cover must not be less than that required to achieve the approved postmining land use. In addition, under

30 CFR 816.116(c) and 817.116(c), the revegetation responsibility period in Tennessee extends for five full years after the last year of augmented seeding, fertilization, irrigation or work other than normal husbandry practices. This rulemaking does not affect any of these rules.

One commenter expressed concern that mining operations would cause the death of small animals. The commenter noted, for example, that there are genetically isolated, evolutionarily distinct, and unique species of amphibians and reptiles in the Cumberland Mountains. The commenter stated that OSM needs to consider the effect of mining on the biological heritage of animals as well as plants.

While these comments are outside the scope of this rulemaking, the existing Federal regulations at 30 CFR 780.16 and 784.21 provide that applications for surface coal mining operations must include a fish and wildlife protection and enhancement plan. This plan must include a description of how, to the extent possible, using the best technology currently available, the operator will minimize disturbances and avoid adverse impacts on fish and wildlife and related environmental values, including compliance with the Endangered Species Act, during the operations and how enhancement of these resources will be achieved where practicable.

A commenter suggested that we require public review of reclamation plans and regular inspections of mine sites.

Again, while this comment is outside the scope of today's rule, existing Federal regulations and the Tennessee Federal program already provide for public review. Sections 30 CFR 773.6 and 942.773 provide for public participation in the permitting process including procedures for filing objections to applications. In addition, 30 CFR 842.11 and 942.842 set forth procedures for periodic Federal inspections and monitoring.

Two commenters suggested that the rules would result in degraded water quality at mine sites.

This rule, which limits excess ground cover where trees are planted, still requires ground cover sufficient to control erosion. Further, existing Federal regulations regarding control of sediment from mine sites require prevention, to the extent possible, of additional contributions of suspended solids to streamflow. Additionally, under 30 CFR 816.42 and 817.42, discharges from mine sites must comply with all applicable State and Federal water quality laws and regulations and

with the effluent limitations for coal mining promulgated by the EPA as set forth in 40 CFR Part 434. The regulations at 30 CFR 780.21 provide for the assessment of water quality prior to mining and require a ground and surface water monitoring plan and a hydrologic reclamation plan. This information is to be used to minimize disturbance to the hydrologic balance, prevent material damage outside the permit area, and to protect the rights of present water users.

One commenter stated that the proposed amendments to the Tennessee Federal program constitute a major Federal action that requires detailed cumulative impact analysis and preparation of an environmental impact statement (EIS) under the National Environmental Policy Act (NEPA). The commenter stated that the proposed rule or an EIS should have better addressed reforestation and revegetation reclamation concerns and provided evidence that the proposed actions will not affect Tennessee's watersheds, reservoirs and water resources.

We disagree with the commenter's assertions. Section 702(d) of SMCRA specifies that the promulgation of a Federal regulatory program for a State under section 504 of SMCRA does not constitute a major action within the meaning of § 102(2)(C) of NEPA. Therefore, there is no need to prepare an EIS for those programs. Consequently, the adoption of amendments to the Tennessee Federal program, which we adopted under section 504 of SMCRA, 30 U.S.C. 1254, does not constitute a major action within the meaning of § 102(2)(C) of NEPA and does not require preparation of an EIS.

The commenter also stated that OSM must determine the effects of the proposed rules on the Tennessee Valley Authority's recent Programmatic EIS and the U.S. Army Corps of Engineers' Floodplain Management Program in Tennessee's coalfields and consult with those agencies before enacting this rule. The commenter also stated that the results of any consultation with various government agencies and with individuals and organizations having an interest in the proposed amendment are missing.

In response, we note that there is no requirement that we address the effect of the rule on documents prepared by other agencies, and we have addressed any comments that we received from State and Federal agencies.

One commenter stated that the revisions to the rules give the KFO too much discretion in determining the appropriate herbaceous vegetative ground cover success standards.

While the revisions in this rulemaking do provide discretion to the KFO to approve ground cover success standards, that discretion is tempered with the existing regulations that require control of erosion. The KFO cannot approve a reclamation plan that does not provide for adequate erosion control from the site. For mine sites with postmining land uses related to forestry, the KFO will require that the permittee's reclamation plans carefully balance the need for erosion control with a vegetative ground cover that does not interfere with tree growth and survival.

Other commenters discussed a wide range of issues that are unrelated to the proposed rule. We are not addressing those comments because they are beyond the scope of this rulemaking.

#### V. Procedural Determinations

##### *Executive Order 12866—Regulatory Planning and Review*

This document is not a significant rule and is not subject to review by the Office of Management and Budget under Executive Order 12866.

a. This rule will not have an effect of \$100 million or more on the economy. The revisions to the bonding requirements and revegetation standards will not adversely affect in a material way the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities.

As discussed in the preamble to the proposed rule and the preamble to the final rule, the bonding provisions should benefit coal operators who experience unanticipated pollutional discharges by providing them with an alternative financial mechanism for the treatment of AMD. The bonding revisions will not add to the operator's cost of doing business since the existing regulations in 30 CFR 942.800 and 30 CFR Part 800 already require that a bond amount be adequate for the cost of reclamation and, when necessary, be adjusted to insure that adequate funds are available. The trust funds or annuities will allow continued treatment of postmining pollutional discharges by the operator and will assist in preventing bankruptcies and potential bond forfeitures since sureties will not likely fund treatment. There are approximately 52 mining operations in Tennessee with AMD problems that may avail themselves of the new bonding provisions.

Our estimates have found that approximately 10 companies will take advantage of the rule that eliminates the arbitrary ground cover requirements on

mine sites to be reclaimed for wildlife habitat, undeveloped land, recreation, or forestry. Approximately 1000–1500 acres are eligible for Phase III bond release annually in Tennessee. The changes to the rules will encourage reforestation of this acreage and provide the basis for healthy, vigorous tree growth. While economic benefits of reforestation to mine operators are limited, the benefits to the environment are numerous and include: Creating diverse, productive forests that provide watershed protection, wildlife habitat, recreational opportunities, and remove carbon dioxide from the air. Additionally, there are economic benefits of reforested sites because forests can offer substantial revenue for landowners who own the trees and job opportunities for local residents who harvest the trees and use the lumber.

b. This rule will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency.

c. This rule does not alter the budgetary effects of entitlements, grants, user fees, or loan programs or the rights or obligations of their recipients.

d. This rule does not raise novel legal or policy issues.

##### *Regulatory Flexibility Act*

The Department of the Interior certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). As previously stated, the revisions to the existing regulations may benefit the regulated industry by allowing an alternative source of bonding. Further, the rule produces no adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States enterprises to compete with foreign-based enterprises in domestic or export markets.

##### *Small Business Regulatory Enforcement Fairness Act*

For the reasons previously stated, this rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. This rule:

a. Does not have an annual effect on the economy of \$100 million or more.

b. Will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions.

c. Does not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to

compete with foreign-based enterprises for the reasons stated above.

#### *Unfunded Mandates*

This rule does not impose an unfunded mandate on State, Tribal, or local governments or the private sector of more than \$100 million per year. The rule does not have a significant or unique effect on State, Tribal, or local governments or the private sector. A statement containing the information required by the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*) is not required.

#### *Executive Order 12630—Takings*

The revisions to the Tennessee Federal program governing the use of trust funds or annuities to fund treatment of postmining pollutional discharges and the changes to the revegetation success standards do not have any significant takings implications under Executive Order 12630. Therefore, a takings implication assessment is not required.

#### *Executive Order 12988—Civil Justice Reform*

In accordance with Executive Order 12988, the Office of the Solicitor has determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order.

#### *Executive Order 13132—Federalism*

In accordance with Executive Order 13132, the rule does not have significant Federalism implications to warrant the preparation of a Federalism Assessment for the reasons discussed above.

#### *Executive Order 13175—Consultation and Coordination With Indian Tribal Governments*

In accordance with Executive Order 13175, we have evaluated the potential effects of this rule on Federally-recognized Indian tribes. We have determined that the revisions would not have substantial direct effects on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes.

#### *Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This rule is not considered a significant energy action under Executive Order 13211. The revisions to the Tennessee Federal program that govern use of trust funds or annuities to fund treatment of postmining

pollutional discharges and the changes to the revegetation success standards will not have a significant effect on the supply, distribution, or use of energy.

#### *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.*

#### *National Environmental Policy Act*

This rule does not require an environmental impact statement because section 702(d) of SMCRA (30 U.S.C. 1292(d)) provides that promulgation of Federal programs do not constitute major Federal actions within the meaning of section 102(2)(C) of the NEPA (42 U.S.C. 4332(2)(C)). This rulemaking was promulgated under section 504 of SMCRA, 30 U.S.C. 1254, and therefore is not subject to NEPA requirements.

#### **List of Subjects in 30 CFR Part 942**

Intergovernmental relations, Surface mining, Underground mining.

Dated: February 21, 2007.

**C. Stephen Allred,**

*Assistant Secretary, Land and Minerals Management.*

■ Accordingly, we are amending 30 CFR Part 942 as set forth below.

#### **PART 942—TENNESSEE**

■ 1. The authority citation for 30 CFR Part 942 continues to read as follows:

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

■ 2. Amend § 942.800 by revising paragraph (a) and adding paragraph (c) to read as follows:

#### **§ 942.800 Bond and insurance requirements for surface coal mining and reclamation operations.**

(a) Except as provided in paragraphs (b) and (c) of this section, part 800 of this chapter, Bond and Insurance Requirements for Surface Coal Mining and Reclamation Operations Under Regulatory Programs, shall apply to any person conducting surface mining and reclamation operations.

(b) \* \* \*

(c) *Special consideration for sites with long-term postmining pollutional discharges.* With the approval of the Office, the permittee may establish a trust fund, annuity or both to guarantee treatment of long-term postmining pollutional discharges in lieu of posting one of the bond forms listed in § 800.12 of this chapter for that purpose. The trust fund or annuity will be subject to the following conditions:

(1) The Office will determine the amount of the trust fund or annuity,

which must be adequate to meet all anticipated treatment needs, including both capital and operational expenses.

(2) The trust fund or annuity must be in a form approved by the Office and contain all terms and conditions required by the Office.

(3) The trust fund or annuity must provide that the United States or the State of Tennessee is irrevocably established as the beneficiary of the trust fund or of the proceeds from the annuity.

(4) The Office will specify the investment objectives of the trust fund or annuity.

(5) Termination of the trust fund or annuity may occur only as specified by the Office upon a determination that no further treatment or other reclamation measures are necessary, that a replacement bond or another financial instrument has been posted, or that the administration of the trust fund or annuity in accordance with its purpose requires termination.

(6) Release of money from the trust fund or annuity may be made only upon written authorization of the Office or according to a schedule established in the agreement accompanying the trust fund or annuity.

(7) A financial institution or company serving as a trustee or issuing an annuity must be one of the following:

(i) A bank or trust company chartered by the Tennessee Department of Financial Institutions;

(ii) A national bank chartered by the Office of the Comptroller of the Currency;

(iii) An operating subsidiary of a national bank chartered by the Office of the Comptroller of the Currency;

(iv) An insurance company licensed or authorized to do business in Tennessee by the Tennessee Department of Commerce and Insurance or designated by the Commissioner of that Department as an eligible surplus lines insurer; or

(v) Any other financial institution or company with trust powers and with offices located in Tennessee, provided that the institution's or company's activities are examined or regulated by a State or Federal agency.

(8) Trust funds and annuities, as described in this paragraph, must be established in a manner that guarantees that sufficient moneys will be available to pay for treatment of postmining pollutional discharges (including maintenance, renovation, and replacement of treatment and support facilities as needed), the reclamation of the sites upon which treatment facilities are located and areas used in support of those facilities.

(9) When a trust fund or annuity is in place and fully funded, the Office may approve release under § 800.40(c)(3) of this chapter of conventional bonds posted for a permit or permit increment, provided that, apart from the pollutional discharge and associated treatment facilities, the area fully meets all applicable reclamation requirements and the trust fund or annuity is sufficient for treatment of pollutional discharges and reclamation of all areas involved in such treatment. The portion of the permit required for postmining water treatment must remain bonded. However, the trust fund or annuity may serve as that bond.

■ 3. In § 942.816, revise paragraph (f)(3) introductory text and paragraph (f)(4) as follows:

**§ 942.816 Performance standards—Surface mining activities.**

\* \* \* \* \*

(f) \* \* \*

(3) For areas developed for wildlife habitat, undeveloped land, recreation, or forestry, the stocking of woody plants must be at least equal to the rates specified in the approved reclamation plan. To minimize competition with woody plants, herbaceous ground cover should be limited to that necessary to control erosion and support the postmining land use. Seed mixes and seeding rates will be specified in the permit.

\* \* \* \* \*

(4) Bare areas shall not exceed one-sixteenth (1/16) acre in size and total not more than ten percent (10%) of the area seeded, except for areas developed for wildlife habitat, undeveloped land, recreation, or forestry.

■ 4. In § 942.817, revise paragraph (e)(3) introductory text and paragraph (e)(4) as follows:

**§ 942.817 Performance standards—Underground mining activities.**

\* \* \* \* \*

(e) \* \* \*

(3) For areas developed for wildlife habitat, undeveloped land, recreation, or forestry, the stocking of woody plants must be at least equal to the rates specified in the approved reclamation plan. To minimize competition with woody plants, herbaceous ground cover should be limited to that necessary to control erosion and support the postmining land use. Seed mixes and seeding rates will be specified in the permit.

\* \* \* \* \*

(4) Bare areas shall not exceed one-sixteenth (1/16) acre in size and total not more than ten percent (10%) of the area seeded, except for areas developed for wildlife habitat, undeveloped land, recreation, or forestry.

[FR Doc. E7-3649 Filed 3-1-07; 8:45 am]

BILLING CODE 4310-05-P