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DEPARTMENT OF THE INTERIOR

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

30 CFR Part 819

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

ACTION: Final rule.

SUMMARY: The Office of Surface Mining Reclamation and Enforcement (OSM) is adopting final rules for conducting auger mining of coal. These rules clarify standards for auger mining, including those relating to maximum coal recovery and to hydrologic-balance and subsidence protection. They also establish standards for auger mining in previously mined areas.

EFFECTIVE DATE: May 27, 1983.

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SUPPLEMENTARY INFORMATION:

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

I. BACKGROUND

Permanent program auger mining rules were initially published on March 13, 1979, and codified at 30 CFR Part 819 (*44 FR 15448*). On March 19, 1982, OSM published proposed rules revising the previous rules relating to auger mining (*47 FR 12088*). These proposed rules would have deleted Part 819 and included all requirements for auger mining in a new section, 30 CFR 816.108.

Throughout the development of these rules, OSM has solicited public comments and recommendations. Following publication of the proposed rules, OSM made provisions to hold public hearings and public meetings upon request. OSM convened a public hearing in Room 2212, Federal Building, Pittsburgh, Pennsylvania, on Friday, April 9, 1982, at 9:30 a.m. However, no persons wishing to testify appeared.

The March 19, 1982, notice provided for the comment period to close on April 19, 1982. To provide the public with a greater opportunity to participate, the comment period was extended to August 25, 1982 (*47 FR 20631*, May 13, 1982). It was subsequently reopened on September 7, 1982, and closed on September 10, 1982 (*47 FR 39201*) to include relevant testimony given at a congressional hearing.

II. DISCUSSION OF COMMENTS AND RULES ADOPTED

OSM received comments on the proposed rules from industry, citizens, environmental groups, and other government agencies. OSM has carefully reviewed each comment and taken every suggestion into consideration in writing this final rule.

GENERAL COMMENTS

Some commenters objected to the placement of the performance standards for auger mining in the Part 816, backfilling and grading rules for surface mining activities. They argued that auger mining is a distinct method of coal recovery which differs from both underground mining and conventional surface mining methods. One commenter stated that the unique issues attendant to augering must be addressed in the design, permitting, and conduct of the auger operation. The same commenter contended that the proposal treated augering as an afterthought or as part of the reclamation phase of surface mining activities, thereby deemphasizing the need for thorough planning in advance of the operational phase to meet the

requirements of Section 515(b)(9) of the Surface Mining Control and Reclamation Act, *30 U.S.C. 1201 et seq.*, (Act). Another commenter recommended that the auger mining rules be moved from Part 816, as proposed, to 30 CFR Part 817, performance standards for underground mining activities, to make it clear that the subsidence rules would be applicable to these operations.

OSM has revised the final rule in accordance with the major points advanced by the first commenter. Because augering is distinct from surface as well as from underground mining, certain of the problems encountered in augering are unique. Accordingly, the performance standards for augering will be retained as a separate part, Part 819. Under the final rule, previous Section 819.1, "Scope," is retained with minor editorial revisions; previous Section 819.2, "Objectives," which contained no substantive requirements, is deleted; and previous Section 819.11 is replaced with new Section 819.11 Auger mining: General, Section 819.13 Auger mining: Coal recovery, Section 819.15 Auger mining: Hydrologic balance, Section 819.17 Auger mining: Subsidence protection, Section 819.19 Auger mining: Backfilling and grading, and Section 819.21 Auger mining: Protection of underground mining, which are discussed below.

To assist the reader in understanding the changes in the final rules, the following Derivation Table shows the relationship of the final rules to the previous sections and the proposed sections.

DERIVATION TABLE. -- AUGER MINING

Final rule Part 819	Previous sections Part 819	Proposed sections Sections 816.108 & 816.109
Section 819.1	Section 819.1	
Section 819.11(a)	Section 819.1	Section 816.108(a)(5).
Section 819.11(b)	Section 819.11(e)	Section 816.108(f).
Section 819.11(b)(1)	Section 819.11(e)(3)	Section 816.108(f)(2).
Section 819.11(b)(2)	Section 819.11(e)(1)	Section 816.108(f)(1).
Section 819.13(a)	[Section 819.59]	
Section 819.13(b)	Section 819.11(a)	Section 816.108(a)(2).
Section 819.13(c)	Section 819.11(a)	Section 816.108(b).
Section 819.15(a)		Section 816.108 (a), (a)(1).
Section 819.15(b)		Section 816.108(c).
Section 819.15(b)(1)	Section 819.11(c)(1)	
Section 819.15(b)(2)	Section 819.11(c) (1 and 2)	Section 816.108(c) (1 and 2).
Section 819.15(c)	Section 819.11(d)	Section 816.108(d).
Section 819.15(c)(1)	Section 819.11(d)(1)	Section 816.108(d)(1).
Section 819.15(c)(2)	Section 819.11(d)(2)	Section 816.108(d)(2).
Section 819.17	Section 819.11(e)(4)	Section 816.108(a)(4).
Section 819.19(a)		Section 816.109(a)(1).
Section 819.19(b)		Section 816.109(a).
Section 819.19(b)(1)	Section 819.11(e)(2)	Section 816.109(a)(2).
Section 819.19(b)(2)		Section 816.109(a)(3).
Section 819.19(b)(3)		Section 816.109(a)(4).
Section 819.19(b)(4)		Section 816.109(a)(5).
Section 819.19(b)(5)		Section 816.109(a)(6).
Section 819.21	Section 819.11(b)	Section 816.108(e).

Although OSM has rejected a commenter's suggestion to move the auger mining rules to Part 817, new final Section 819.17 will provide that all auger mining operations must be planned and conducted to comply with the subsidence-control requirements of Section 817.121 (a) and (c). The rationale for this change is explained below.

One commenter suggested that OSM consider the possibility of developing another set of rules specifically for Extended Depth Secondary Recovery (EDSR). The commenter characterized EDSR as a highly sophisticated method capable of recovering 80 to 85 percent clean coal to a depth of 200 feet without additional surface disturbance. Based on these factors, the commenter felt that EDSR technology requires rules designed specifically for these types of operations.

Auger mining is narrowly defined in 30 CFR 701.5, and the definition does not specifically include alternate technologies such as EDSR or the Thin Seam Miner (TSM). However, States have sufficient latitude in their individual State programs to treat such technologies as they do conventional augering operations. Alternately, the technologies can be treated as experimental practices under Section 711 of the Act. No revision of the final auger mining rules will be made at this time to accommodate EDSR or TSR. OSM will continue to collect information on the effects of this technology and will consider rule changes in the future if they become necessary.

SPECIFIC COMMENTS

SECTION 819.1 - SCOPE.

Final Section 819.1 explains that Part 819 sets the performance standards for auger mining operations. This section was not contained in the proposed rule which was to be included in Part 816, but is retained with only minor editorial changes from the previous rule.

SECTION 819.11 - GENERAL.

SECTION 819.11(a)

Final Section 819.11(a) specifies that auger mining operations must be conducted in accordance with the requirements of Part 816, except as otherwise specified in Part 819. This requirement was contained in previous Section 819.1, "Scope." The revised language of final Section 819.11(a) also makes it clear that the requirements of Part 819 supersede the requirements of Part 816 if a provision in Part 819 enumerates special requirements for auger mining operations.

Proposed Section 816.108(a)(5) required that all augering operations be planned and conducted consistent with reclamation being performed in accordance with all other requirements of 30 CFR Chapter VII. OSM considered and rejected two comments on this provision. One commenter suggested that the word "consistent" be replaced by the word "compatible" to provide flexibility by allowing each auger mining operation to be tailored according to local mining conditions, facilities, climate, geology, and terrain within a State. Another commenter suggested that the term "applicable" be inserted between the words "other" and "requirements" in the proposed rule to prevent the misapplication of rules which are inapplicable to auger mining. The final rule contains no substantive change from the language of the proposal. For this reason, the requirements of proposed Section 816.108(a)(5) are adequately covered under the terms of final Section 819.11(a). Addition of term "applicable" to the language of final Section 819.11(a) is also unnecessary. Such a revision could suggest that a rule is inapplicable to auger mining unless its application to that activity is specifically stated in Part 819. This would be an incorrect interpretation of the requirements of Part 819.

SECTION 819.11(b)

Proposed Section 816.108(f) provided that the regulatory authority would prohibit augering if it determined that adverse water-quality impacts could not be prevented or corrected; that such a prohibition was necessary to maximize utilization, recoverability, or conservation of the solid-fuel resource; or that effects from augering would prevent performance of reclamation in accordance with all other requirements of the Act and all other provisions of Chapter VII. In response to remarks from commenters and for reasons discussed below, OSM has revised the proposed language and adopted a new final Section 819.11(b). Under final Section 819.11(b), the regulatory authority may prohibit auger mining, if necessary to maximize the utilization, recoverability or conservation of the solid-fuel resource, or to protect against adverse water-quality impacts.

One commenter stated that proposed Section 816.108(f) was unnecessary inasmuch as it would allow the regulatory authority to prohibit a specific form of mining. The commenter added that such a determination exceeded the general powers of the regulatory authority as well as its knowledge and capability. OSM disagrees with this comment because the

proviso in Section 515(b)(9) of the Act clearly allows the regulatory authority to prohibit augering under specific circumstances. The commenter's concern about the legal and technical competence of regulatory authorities is unjustified since Section 503(a)(3) of the Act conditions State program approval on proof that the State regulatory authority has sufficient personnel and resources to ensure effective implementation of the State's program. In addition, OSM's oversight responsibility and the procedures in 30 CFR Part 733 for Federal enforcement of State programs or withdrawal of State program approval will provide OSM the means to identify and remedy any problems with implementation of a State program.

Another commenter recommended that the proposed rule be changed to track the language in the proviso of Section 515(b)(9) of the Act. This commenter felt that the statutory language provided a better statement as to when augering "may" be prohibited than the broad, undefined language of proposed Section 816.108(f) that required a mandatory prohibition. OSM has accepted this recommendation and has revised new Section 819.11(b) to provide that the regulatory authority may prohibit augering if necessary to maximize the utilization, recoverability, or conservation of the solid fuel resources or to protect against adverse water-quality impacts. The change from "shall" in proposed Section 816.108(f) to "may" in new Section 819.11(b) is consistent with Section 515(b)(9) of the Act. The revised language will also minimize the potential for prohibitions on mining where not specifically provided for in the Act.

Several commenters suggested that the words "prevented or" be deleted from the language of proposed Section 816.108(f)(1). One commenter argued that augering should be permitted if adverse impacts on water quality could be minimized or corrected within a short time. The commenter also found the proposed rule duplicative of certain requirements in Chapter VII, Subchapter F, relating to the designation of areas as unsuitable for all or certain types of mining. Another commenter contended that the rule, as written, would not allow for even minor, temporary onsite adverse effects on water quality, thereby making any auger mining activity impossible. An additional commenter claimed that an absolute requirement to prevent changes in water quality was inconsistent with the requirement in Section 515(b)(9) of the Act to minimize disturbance of the quality of water in auger holes.

OSM agrees in part with these commenters. Under final Section 819.11(b)(2), the regulatory authority is allowed to prohibit augering if it determines that prohibition is necessary to "protect against" adverse water-quality impact. However, the obligation to protect against adverse impacts under the final rule should not be interpreted to require total prevention of onsite temporary impacts. An absolute requirement for total prevention of adverse water-quality impacts is more stringent than the requirements in Section 515(b)(9) of the Act and inconsistent with Section 515(b)(10) of the Act. The final rule complements other sections of the Act which afford protection to water quality, including Sections 510(b)(3) and 515(b)(10), and allows the regulatory authority to prohibit augering where necessary to protect against adverse impacts on water quality. However, planning for augering should include measures to prevent, where possible, as well as to correct, harmful effects.

As previously stated, the language in proposed Section 816.108(f) has been revised to track the wording of the proviso in Section 515(b)(9) of the Act. Final Section 819.11(b)(1), as adopted, will grant the regulatory authority discretion to prohibit augering upon finding the prohibition necessary to maximize the utilization, recoverability, or conservation of the solid-fuel resource. This provision will assure the achievement of the requirements that all auger mining operations be planned and conducted to maximize the recoverability of remaining mineral reserves and that access be left for future underground mining.

Proposed Section 816.108(f)(3) provided that the regulatory authority must prohibit auger mining if it determined that the effects from augering operations would prevent reclamation in accordance with all other requirements of the Act and all other provisions of Chapter VII. One commenter suggested that the language of the proposed rule be revised to require reclamation to be performed "in accordance with all other 'applicable' requirements of the Act and all other 'applicable' requirements of this chapter." The commenter argued that insertion of the term "applicable" would prevent the misapplication of standards not applicable to augering as well as clarify that special considerations in certain rules, such as those for remining on steep slopes, apply to auger mining.

OSM has found the language of proposed Section 816.108(f)(3), which prohibited auger mining if its effects would prevent reclamation, redundant of other provisions of its rules. Under OSM's permitting requirements and the Act, a permit cannot be issued unless the regulatory authority finds that all requirements of the rules and the Act are met, including the assurance of proper reclamation. Final Section 819.11(a), also requires all auger mining operations to be

planned and conducted in accordance with the requirements of Part 816. Accordingly, proposed Section 816.108(f)(3) has not been adopted in the final rule.

SECTION 819.13 - COAL RECOVERY.

New final Section 819.13 contains requirements for coal recovery during and after auger mining operations. Several commenters expressed concern or confusion about requirements for maximizing recovery of the coal resource. These requirements have been reorganized and consolidated in a final Section 819.13 to clarify the various standards applicable to maximizing coal recovery.

Three provisions govern coal recovery in the final auger mining rule. The first, in final Section 819.13(a), requires the coal operator to comply with the requirements of Section 816.59. Under Section 816.59, surface mining operations must be conducted to maximize the utilization and conservation of the coal. The second provision, in final Section 819.13(b), implements the Act's requirement that an operator maximize the recoverability of mineral resources remaining after the augering operation and reclamation are complete. The third, in final Section 819.13(c), requires that auger mining operations leave areas of undisturbed coal to provide access for future underground mining. Final Section 819.13(a), thus, implements the requirements of Section 515(b)(1) of the Act, while final Section 819.13 (b) and (c) implements the requirements of Section 515(b)(9) of the Act.

SECTION 819.13(a)

Final Section 819.13(a), as discussed, references the coal recovery requirements of Section 816.59. Though not in the proposed rule this provision is included in the final rule for the convenience of the reader and to clarify the confusion noted by commenters.

SECTION 819.13(b)

Proposed Section 816.108(a)(2) provided that all auger mining operations must be planned and conducted to prevent unnecessary loss of coal reserves. One commenter recommended that the language of the proposed rule be changed to require the operation to "maximize recoverability of mineral reserves remaining after the operation and reclamation are complete" to assure consistency with Section 515(b)(9) of the Act, which uses that precise language. OSM accepted this recommendation, and the language has been modified accordingly in Section 819.13(b) of the final rule.

Another commenter suggested that proposed Section 816.108(a)(2) be revised not only to track the language of Section 515(b)(9) of the Act, but also to recognize the technical and economic constraints of the operator to remine sites by augering. The commenter's suggested rule would require all augering operations to "[a]chieve maximum recovery of the coal resource given the economic and technical constraints on the coal mining operator." The commenter explained that because mining companies are constrained or limited by the type of equipment they have and their economic situation, they all cannot auger mine a site with the same efficiency and thoroughness. The commenter claimed the regulatory authority might deny certain operators the permit to remine by augering if their equipment or economic situation did not meet the optimum standards the regulatory authority set for the maximum recovery of coal.

The commenter thought the regulatory authority's assessment of whether maximum coal recovery would be met should not be based on set optimum standards, but rather on the individual characteristics of both the remining site and the operator proposing to auger mine the site.

The revision suggested by the commenter is unnecessary since the new rule allows regulatory authorities to recognize technical and economic constraints on remining by augering. Economic and technical constraints are appropriate factors for the regulatory authority to consider in determining whether the operation would result in the maximum utilization and conservation of coal. On the other hand, the regulatory authority should not limit its consideration only to the economic conditions of a particular operator in determining compliance with this requirement. Thus, under final Section 819.11(b), the regulatory authority is allowed to prohibit auger mining if auger mining would not maximize the utilization, conservation, or recoverability of the coal, even though the operator is prepared to use only auger mining techniques. The regulatory authority must make this determination on a case-by-case basis, taking into account site-specific conditions. The existing rules are satisfied by a demonstration that all coal which is economically feasible to recover will

be mined. See the preamble to Section 816.59 (*44 FR 15178*, March 13, 1979) for additional discussion of the requirement to maximize utilization and conservation of the coal resource.

A commenter requested clarification of the relationship between the auger mining requirements in Parts 816 and 819 and the requirements for maximum economic recovery under the Minerals Management Service regulations for mining Federal coal. The relationship between the two sets of regulations is stated in recently revised 30 CFR 740.19(a)(2) which provides that "[s]urface coal mining and reclamation on lands containing leased Federal coal shall be conducted in accordance with the requirements of the terms, conditions and stipulations of the lease issued under the Mineral Leasing Act and its implement regulations [30 CFR] Part 211 . . . , as applicable, and the mining plan." Section 740.19 is applicable to augering operations on Federal lands. (*48 FR 6912*, February 16, 1983).

SECTION 819.13(c)

Proposed Section 816.108(b) required each person who conducts auger mining operations to leave areas of undisturbed coal, as approved by the regulatory authority, to provide access for future underground mining activities to coal reserves remaining after augering is completed, unless it is established that the coal reserves have been depleted or are so limited in thickness or extent that it will not be practicable to recover the remaining coal. The proposed rule also provided that the regulatory authority would make this determination upon presentation of appropriate technical evidence by the operator. OSM has adopted the proposed rule in new final Section 819.13(c).

One commenter thought that resource recovery is a judgment by the operator which should not be governed by the regulatory authority. The commenter claimed this determination exceeds the expertise and capability of the regulatory authority and does not encourage resource recovery as mandated by the Act.

OSM does not agree with this comment, and the language of proposed Section 816.108(b) has been retained in final Section 819.13(c). Section 515(b)(9) of the Act requires that augering operations be conducted "in a manner to maximize recoverability of mineral resources remaining after the operation and reclamation are complete . . . ," and states "that the permitting authority may prohibit augering if necessary to maximize the utilization, recoverability or conservation of the solid fuel resources. . . ." Thus, the statute assigns the responsibility to the regulatory authority for regulation of auger mining to assure maximum recovery and conservation of the solid-fuel resource. In making this determination, the regulatory authority must take into account the technical data submitted by the operator.

Another commenter urged that the requirement in previous Section 819.11(a) for a 250-foot barrier pillar at 2,500-foot intervals be retained to maximize recovery and assure access to remaining reserves potentially recoverable by underground mining after augering is completed. The commenter contended that the absence of a definite footage standard from the proposed rule would require the regulatory authority to gauge the adequacy of pillars on a case-by-case basis. Because the need for individual-case determinations would exacerbate existing strains on the resources of regulatory authorities, the commenter argued that there would be a tendency for regulatory authorities to approve all plans, regardless of their technical adequacy.

OSM is denying the commenter's request because retention of this requirement is unnecessary. The requirements in Section 515(b)(9) and (b)(10) of the Act will be met if the regulatory authority is granted discretion to determine how the performance standards can be achieved on a site-specific basis. Since geologic conditions differ from one part of the country to another, the objectives of the Act are not best achieved by requiring all mine operators to comply with the same specific design criteria. Final Section 819.13(c) allows the regulatory authority flexibility in setting design criteria based on variations in geologic, topographic, and other site-specific conditions. OSM disagrees with the contention that the rule will create additional burdens which regulatory authorities cannot meet. Under Section 503(a)(3) of the Act, State programs are approved only if State regulatory authorities have sufficient technical personnel and funding to implement their programs in accordance with the Act's requirements. Furthermore, OSM's oversight of State programs and procedures for Federal enforcement of State programs at 30 CFR Part 733 will ensure the effective implementation of State regulatory programs.

One commenter suggested that OSM allow those areas that "will be depleted by the auger mining operation" to be exempted from having to leave areas of undisturbed coal. OSM has not accepted this suggestion. The relevant language of final Section 819.13(c), which was not proposed to be changed, allows the regulatory authority to permit no undisturbed areas to be left if the operator can show that reserves are so limited as to make their recovery impracticable.

A final commenter felt that the proposed provisions requiring undisturbed coal to be left for underground access overlooked potential problems primarily related to auger mining conducted in the West. Since auger mining in the West is usually done in conjunction with surface mining and since reclamation laws and regulations require the reclamation of highwalls, the commenter argued that it would be unrealistic to require auger operations to leave undisturbed coal in areas where the highwalls will be reclaimed. In the interest of resource conservation and recovery, the commenter suggested that OSM allow complete auger mining in area surface mining situations where the highwall will be reclaimed. OSM has rejected this comment. Elimination of highwalls is required nationwide and provides no basis for a variance from the auger mining requirement to provide access for possible future underground mining. New Section 819.13(c) allows the regulatory authority to determine the extent of areas that must be left undisturbed to provide such future access.

SECTION 819.15 - HYDROLOGIC BALANCE.

New final Section 819.15 contains requirements for protection of the hydrologic balance. This rule, as finally adopted by OSM, reflects the requirements of proposed Section 816.108(a)(1), (c), and (d). Final Section 819.15(a) requires that all auger mining be planned and conducted to minimize disturbance of the prevailing hydrologic balance in accordance with the requirements of Sections 816.41 and 816.42. Additionally, final Section 819.15 (b) and (c) provides special standards for sealing auger holes.

SECTION 819.15(a)

Proposed Section 816.108(a)(1) required that all auger mining operations be planned and conducted to minimize disturbance of the prevailing hydrologic balance and of the quality and quantity of water in surface- and ground-water systems, both during the operation and after reclamation, as required in Sections 816.41 and 816.42. No comments were received on this paragraph. Therefore, OSM has adopted this general provision, with some editorial revision, as final Section 819.15(a). No substantive change is intended.

SECTION 819.15(b)

Proposed Section 816.108 (c) and (d) specified requirements for sealing each auger hole to prevent acid and toxic drainage from the auger holes and access of air to the remaining coal. OSM received several comments on the language of the proposed rule.

One commenter suggested that the term "auger holes" be changed to "[a]ll auger holes" or to "[e]ach auger hole" because Section 515(b)(9) of the Act requires all auger holes to be sealed except where the regulatory authority determines that the impoundment of water by sealing may create an environmental or public-safety hazard. OSM has accepted this comment and revised the final rule accordingly.

Commenters suggested that auger holes be sealed only "[w]hen the regulatory authority determines that drainage from [such] auger holes would create a hazard to the environment or to public health or safety." The commenters argued that the proposed rule would require the sealing of auger holes even when no constructive purpose would be served. This suggestion has been rejected. Section 515(b)(9) of the Act requires all auger holes to be sealed with an impervious and noncombustible material "except where the regulatory authority determines that the resulting impoundment of water in such auger holes may create a hazard to the environment or the public health or safety [emphasis added]." Thus, the Act requires sealing of auger holes as a general rule. The commenters' suggestion to require sealing of auger holes only under certain conditions is inconsistent with the requirement.

Proposed Section 816.108(c)(1) required auger holes to be sealed with impervious and noncombustible material to prevent drainage from those holes and access of air to the coal. Proposed Section 816.108(c)(2) required sealing of auger holes as contemporaneously as possible with the augering operation, as approved by the regulatory authority.

Two commenters requested that OSM reinstate in this final rule the requirement of previous Section 819.11(c)(1) that auger holes containing acid- or toxic-forming material be sealed within 72 hours or that discharge be treated within that time to meet effluent and water-quality standards until sealing occurs. One commenter argued that the previous provisions were more enforceable and therefore should be retained. Another commenter felt that the previous

requirement should be reinserted in the new rule since plugging auger holes within 72 hours would cause a significant decrease in the amount of acid mine drainage ultimately generated from those holes as well as reduce the possibility of acid seepage after reclamation. OSM has accepted these comments and reinstated the 72-hour sealing requirement in new final Section 819.15(b).

A commenter also objected to the deletion of references to plugging as the preferable method of sealing auger holes in proposed Section 816.108(c)(1). The commenter suggested that the final rule retain the "plugging" requirement from previous Section 819.11 because plugging by backfilling and compacting noncombustible material is the most common and preferable method of creating a watertight seal for an auger hole. OSM has rejected this suggestion and will not mandate the plugging of auger holes in every case. The language of final Section 819.15(b) allows an operator to use any technique approved by the regulatory authority, including plugging, to meet the general performance standards for sealing auger holes with impervious and noncombustible materials. This approach is consistent with Section 515(b)(9) of the Act.

OSM considered two comments on proposed Section 816.108(c)(2). The first commenter stated that the "as contemporaneously as practicable" requirement of the proposed rule was more restrictive than previous Section 819.11(c)(2) in not allowing 30 days for sealing auger holes which do not discharge acid- or toxic-forming water and less restrictive than previous Section 819.11(c)(1) in not requiring sealing within 72 hours for auger holes in which such discharges are present. This commenter felt that the proposed standard would result in less flexibility where necessary and more uncertainty regarding onsite and offsite environmental protection. For this reason, he suggested that the 30-day requirement for sealing all auger holes not discharging water, as provided in the previous rule, be retained. OSM has rejected this comment and adopted the "as contemporaneously as practicable" requirement in final Section 819.15(b)(2). In nonhazardous situations, the regulatory authority should have the discretion, on the basis of site-specific conditions, to determine the time period within which auger holes must be sealed. Accordingly, the new rule, as revised and adopted by OSM, grants the regulatory authority discretion to require sealing "as contemporaneously as practicable" where auger holes are not discharging acid- or toxic-forming water.

Another commenter suggested that proposed Section 816.108(c)(2) be revised to track language in the preamble to the proposed rule that all auger holes be sealed as "contemporaneously as practicable with the augering operation, as approved by the regulatory authority on a site specific basis." This commenter contended that the addition of the phrase "on a site specific basis" would permit such factors as local geographic and topographic conditions, adverse weather conditions, the size of the operation, and any association of augering with a conventional surface mining operation to be considered by the regulatory authority in reviewing the sealing schedule proposed in the application for an auger mining permit. It is unnecessary to insert the specific phrase recommended by the commenter into the language of final Section 819.15(b)(2). OSM recognizes that the regulatory authority should have the flexibility to take into account site-specific conditions in determining what constitutes sealing "as contemporaneously as practicable" for a particular augering operation. Under final Section 819.15(b)(2), the regulatory authority has the flexibility to consider the factors cited by the commenter.

SECTION 819.15(c)

Proposed Section 816.108(d) provided that auger holes need not be sealed with an impervious material to prevent drainage if the regulatory authority determined that the resulting impoundment of water may create a hazard to the environment or public health or safety and that drainage from the auger holes will not pose a threat of pollution to surface water and will comply with the requirements of Sections 816.41 and 816.42. No comments were received on this provision which generally tracks previous Section 819.11(d), and it has been adopted, as proposed, in new final Section 819.15(c).

SECTION 819.17 - SUBSIDENCE PROTECTION.

New final Section 819.17 contains requirements for protection of surface areas from subsidence damage that may result from auger mining. This section reflects the requirements of proposed Section 816.108(a)(4), as revised by OSM on the basis of comments.

Proposed Section 816.108(a)(4) required that all auger mining operations be planned and conducted to prevent disturbance of, or damage to, structures or facilities from subsidence both during and after mining. OSM has adopted a

final version of this proposed rule which incorporates a number of changes. This new final rule requires an operator who conducts an augering operation to comply with the requirements of Section 817.121 (a) and (c).

One commenter recommended that the proposed rule be amended to allow auger mining only when subsidence can be prevented. This comment has been rejected. Another commenter questioned whether Section 516(b)(1) of the Act was being relied upon as authority for proposed Section 816.108(a)(4) and argued that OSM had no authority under this statutory provision to require prohibition of auger mining where subsidence could not be prevented and would cause damage. The commenter also recommended that the preamble include citations to the specific statutory provisions relied on by OSM as sources of authority for the final rule on subsidence prevention in auger mining.

The Act does not provide that auger mining may be prohibited if subsidence cannot be prevented. The proviso of Section 515(b)(9) of the Act vests the permitting authority with discretion to prohibit auger mining only when "necessary to maximize the utilization, recoverability or conservation of the solid fuel resources or to protect against adverse water quality impacts." These criteria are included in final Section 819.11(b). Even Section 516(b)(1) of the Act implicitly allows subsidence, and only requires that underground mine operators adopt measures to prevent or minimize disturbance and subsidence to the extent technologically and economically feasible.

Specifically, Sections 515(b)(9), 515(b)(12), and 516(b)(1) of the Act were relied upon in the proposal. The authority, basis, and purpose of Section 819.17, as finally adopted, is the same as for proposed Section 816.108, except that Section 507(f), 515(b)(2), 515(b)(3), and 515(b)(10) of the Act provide additional statutory authority.

Sections 515(b)(2) and 515(b)(3) of the Act, requiring the restoration of premining land-use capability and approximate original contour, and Section 507(f) of the Act, requiring liability insurance for personal injury and property damage, provide ample authority for subsidence-protection measures for augering operations.

A commenter objected to proposed Section 816.108(a)(4) on the grounds that it would render subsidence standards for auger mining more stringent than subsidence standards for other types of mining by requiring auger operations to prevent damage from subsidence in all cases without allowing operators the option of mitigating these damages. For this reason, the commenter recommended that OSM adopt the same subsidence standards for auger mining as were proposed for underground mines under Section 817.121 (*47 FR 16609*, April 16, 1982).

Because subsidence may occur in augering operations, the same subsidence-control measures adopted for underground mining activities in Section 817.121 are appropriate for auger mining operations. Standards relating to protection from subsidence should be consistent without regard to whether the subsidence results from underground mining or augering operations. Section 817.121(a) requires an operator to adopt measures consistent with known technology to prevent subsidence to the extent technologically and economically feasible or, alternatively, to adopt mining technology which provides for planned subsidence in a predictable and controlled manner. Accordingly, OSM has revised proposed Section 816.108(a)(4) to incorporate the provisions of Section 817.121(a) to ensure that an operator conducting augering operations will be bound by the same performance standards as are applicable to potential subsidence from underground mining, both during mining and after completion of mining. To accommodate the commenter's concern that subsidence can materially damage land without causing damage to structures and facilities, OSM has specifically incorporated the remedial requirements of Section 817.121(c) in final Section 819.17. Under Section 817.121(c), operators would be required to take specific remedial action if material damage is caused to the land as a result of subsidence. The final revisions to Section 817.121 will be provided in a separate rulemaking.

SECTION 819.19 - BACKFILLING AND GRADING.

New Section 816.19 sets backfilling and grading requirements for auger mining operations. Paragraph (a) contains general requirements and Paragraph (b) contains rules applicable to auger mining operations conducted on previously mined areas.

OSM received comments on backfilling and grading requirements for auger mining operations in connection with both its proposal on second-cut contour mining, Section 826.12(b) (*47 FR 928*, January 7, 1982) that was later adopted as interim final Section 826.12(b) (*47 FR 51316*, November 12, 1982) and with its proposal on remining, Section 816.109 (*47 FR 27734*, June 25, 1982). Several commenters suggested that OSM address backfilling and grading requirements for auger mining on previously mined areas in the final rules for augering operations, rather than the final rules for

backfilling and grading, or re-mining. OSM has accepted this suggestion and has adopted specific backfilling and grading requirements for auger mining of previously mined areas in new Section 819.19(b). Comments received on the re-mining or second-cut contour mining rulemakings, which address auger mining of previously mined areas, are responded to in this preamble discussion of final Section 819.19(b).

SECTION 819.19(a)

Proposed Section 816.108(a)(3) required auger mining operations to be planned and conducted to ensure fill stability. To avoid confusion, OSM has revised the language of the proposed rule to provide that auger mining operations must be conducted in accordance with the general backfilling and grading requirements of Sections 816.102 and 816.104-816.106. This revision is reflected in new Section 819.19(a).

A commenter sought confirmation of whether "fill stability" in proposed Section 816.108(a)(3) referred to the stability of backfilled highwalls and asked whether the stability factors for backfilled highwalls were also applicable to auger mining operations under the rule. OSM confirms that "fill stability" refers to the stability of any backfill, including backfilled highwalls, and that the minimum static safety factor of 1.3 is required for backfilling highwalls associated with auger mining under the final rule. However, these requirements have not been specified in new Section 819.19(a) since they are implicit in the rule's references to the backfilling and grading requirements for surface mining activities, which require restoration of disturbed areas to their approximate original contour (AOC) and complete elimination of any highwall.

SECTION 819.19(b)

New final Section 819.19(b) prescribes backfilling and grading requirements for auger mining of previously mined areas which were not reclaimed to the standards of 30 CFR Chapter VII where there is insufficient reasonably available spoil to backfill the highwall completely. The final rule requires the highwall to be eliminated "to the maximum extent technically practical" according to the criteria of Section 819.19(b)(1-4). The language of final Section 819.19(b) generally tracks the provisions of interim final Section 826.12(b) for re-mining on steep slopes (*47 FR 51316*, November 12, 1982), except for the additional requirement specified in Section 819.19(b)(4). Interested persons should consult the preamble to Section 826.12(b) for a more detailed discussion of the meaning and rationale for the precise language used in final Section 819.19(b).

Several commenters claimed that the highwall-elimination requirement provides an economic disincentive to auger re-mining operations since auger mining generates insufficient spoil for complete backfilling of highwalls and since operators ordinarily do not have appropriate equipment to transport spoil material from borrow pits outside the permit area to the re-mining site. One commenter supported the requirement for elimination of highwalls "to the maximum extent practical" proposed re-mining Section 816.109(a), claiming that it would encourage operators to maximize coal recovery by using thin-seam mining techniques in situations where thickness of overburden would make conventional surface mining operations uneconomical.

OSM recognizes that insufficient spoil material and equipment limitations are constraints on re-mining by auger methods. In response to commenters' concerns, the phrase "to the maximum extent practical" in proposed re-mining Section 816.109(a) has been changed to "to the maximum extent technically practical" in final Section 819.19(b). Operators are required to use only standard backfilling and grading procedures and equipment to eliminate highwalls in accordance with final Section 819.19(b). This change is intended to reflect OSM's belief that the Act does not require operators to employ extraordinary measures to eliminate the highwall in re-mining situations where spoil is insufficient for complete backfilling of the highwall.

Commenters found proposed re-mining Section 816.109(a)(3), which required elimination of highwalls to the maximum extent practical, economically and environmentally senseless inasmuch as operators would be required to disturb areas with 20 to 30 years of vegetation to backfill preexisting, nonpolluting highwalls. They suggested that OSM require only partial backfilling and grading of preexisting benches during reclamation after re-mining to avoid disturbance of land surfaces not contributing to drainage or erosion problems. OSM has rejected the commenters' suggestion. The Act generally requires complete elimination of highwalls and restoration of the AOC. Because Congress did not specifically consider the re-mining of previously mined areas, a limited exception to the general requirement is justified where insufficient spoil exists within the permit area to eliminate the highwall completely. However, it is consistent with

Congress' intent to require all reasonably available spoil within the permit area to be used to cover the newly affected highwall even if such spoil is covered with vegetation.

In response to a comment, one change has been made to the concept of reasonably available spoil as it appeared in the November 12, 1983 steep slope re-mining rule. The commenter was concerned that possible abuse of the rule could result from a situation in which spoil in the immediate vicinity of the permit area would not be considered reasonably available solely because it would not be within the permit area. To account for this situation the final rule requires operators, in determining the reasonable availability of spoil, to include in the permit area any spoil in the immediate vicinity of the auger mining operation.

However, the rule does not require the disturbance of virgin areas unless insufficient spoil were available to cover the auger holes with 4 feet of material. This requirement is discussed below. Following the required backfilling and grading of the highwall, the revegetation requirements of Sections 816.111, 816.113, 816.114, and 816.116 apply to all disturbed portions of the permit area.

One commenter thought the economics of complete backfilling and grading would discourage re-mining. Because partially reclaimed highwalls are more environmentally stable than unreclaimed, abandoned highwalls, the commenter suggested that restoration to AOC be required only for areas where new mining or second-cut re-mining occurs, but not for re-mined areas where augering or thin-seam mining techniques are used and no additional spoil is generated. OSM generally agrees with the commenter's position. Final Section 819.19(b) reflects the applicable standards for augering operations on previously mined areas to ensure that reclamation proceeds in an environmentally sound manner.

Several commenters objected to the proposal to allow auger mining operations on previously mined lands a variance from the AOC restoration requirement on the grounds that auger mining renders existing highwalls inherently unstable. They asserted that OSM should require total elimination of existing highwalls adversely impacted by auger re-mining operations, based on the decisions of the Interior Board of Surface Mining Appeals (Board) in *Miami Springs Properties v. OSM*, 2 IBSMA 399 (December 23, 1980) and *Cedar Coal v. OSM*, 1 IBSMA 145 (April 20, 1979). OSM disagrees with the commenters' reading of the Board's opinions in *Miami Springs* and *Cedar Coal*. Neither decision provides authority for the principle that the highwall must be presumed adversely affected by a mining operation. These cases provide that OSM is without authority to require an operator to eliminate a preexisting highwall unless the operator's activities will have an adverse physical impact on that portion of the highwall. Commenters should refer to the preamble discussion in the re-mining proposal (47 FR 27737, June 25, 1982) for a more detailed explanation of the legal justification for not requiring complete elimination of preexisting highwalls in previously mined areas which were not reclaimed to meet the performance standards of the permanent program.

Under new final Section 819.19(b)(3), for all auger mining operations on previously mined areas, the coal seam mined must be covered with a minimum of 4 feet of nonacid-, nontoxic-forming material. This additional requirement is appropriate for auger mining, even though it may require the operator to disturb a virgin area to obtain additional spoil, because of the small quantity of spoil generated during auger mining and because of the potential water-quality problems which may result from leaving exposed coal seams and uncovered auger holes.

One commenter suggested that the proposed rule be replaced by the following provision:

When augering operations are conducted on previously mined areas, auger holes shall be covered with a minimum of four feet of non-toxic, non-combustible material. The highwall shall be covered to the extent feasible using available material without disturbing additional acreage.

OSM has accepted the commenter's suggested language with respect to providing special standards for auger mining previously mined areas and requiring a minimum of 4 feet of cover over auger holes. However, the suggestion to allow less than 4 feet of cover over auger holes where additional acreage would have to be disturbed has been rejected for the reasons explained above.

Final Section 819.19(b)(4) requires that any remnant of the highwall must be stable and not pose a hazard to the public health and safety or to the environment. This provision was proposed as part of re-mining Section 816.109(a)(5) (47 FR 27734, June 25, 1982).

A commenter thought that proposed remining Section 816.109(a)(5) was inconsistent with the statutory requirement for complete highwall elimination on the basis of a suggestion in the preamble of the remining proposal that other measures, including flattening the slope or stepping the highwall, would be adequate for stabilizing highwalls.

OSM has rejected the commenter's contentions. Final Section 819.19(b)(4) applies only to those highwall remnants remaining after the remined highwall has been covered to maximum extent technically practical, using all reasonably available spoil. Under new Section 819.19(b)(4), the operator is required to demonstrate the stability of the remaining highwall to the satisfaction of the regulatory authority. However, the final rule allows the operator to specify the means that will be used to stabilize the remaining highwall.

One commenter thought that proposed remining Section 819.19(e) failed to explain how and by whom it would be determined whether remining by augering would adversely affect a preexisting highwall. Under final Section 819.19(b), the regulatory authority is required to determine whether the proposed auger remining operation will adversely affect any preexisting highwall. This determination will be made during the process of permit approval on the basis of information submitted to the regulatory authority by the operator. The best information to consult in connection with the determination of highwall stability is data relative to highwall slope, type of rock, or observations of existing highwalls under similar conditions. In view of these considerations, final Section 819.19(b) allows the regulatory authority to determine highwall stability according to these site-specific conditions.

OSM's proposal on remining (47 FR 2774, June 25, 1982) included permit application requirements for auger mining of previously mined lands. Section 780.34(a), as proposed, specified information needed in all remining permit applications to meet the performance standards of proposed Section 816.109 for backfilling and grading of previously mined lands. Additional permit application requirements for remining by augering were provided in proposed Section 780.34(c).

OSM has decided not to adopt proposed Sections 780.34 and 784.34 as final rules on remining permit applications. Existing Section 785.20 contains sufficient permit requirements to cover the application requirements for remining operations. Additional standards may be added by individual State regulatory authorities as necessary to accommodate the needs of individual State programs. As experience is gained under the rule, additional guidance may be added to the Federal rule if it becomes apparent that such guidance is necessary. Some commenters supported proposed Section 780.34 inasmuch as it would allow the regulatory authority the flexibility to consider diversity of terrain and site-specific conditions of previously mined areas. One commenter thought proposed Section 780.34(c) should apply to secondary-recovery techniques as well as to conventional auger mining methods in remining situations. Another commenter claimed that the permit application requirements for auger mining of previously mined lands proposed in Section 780.34(c) would discourage the use of the Thin Seam Miner (TSM) and Extended Depth Secondary Recovery (EDSR) methods for remining. A commenter argued that the proposal requiring applications for remining permits to assure long-term stability of highwalls would make auger mining of previously disturbed lands sufficiently costly to eliminate its use in remining situations. For this reason, the commenter recommended that monies from the Abandoned Mine Reclamation Fund (AML Fund) be used to finance the cost of ensuring the stability of augered highwalls after remining. Another commenter contended that OSM should require auger mining operations on previously mined lands to comply with special permitting and enforcement requirements in the absence of scientific proof that the proposed remining operation would not adversely affect any preexisting highwall.

As previously indicated, this rule is not written specifically for thin-seam mining or extended-depth recovery mining. States may, however, apply these rules to such mining operations if deemed appropriate based on local conditions. OSM does not believe that these rules impose an undue burden on operators to provide information on the stability of highwall remnants. As previously indicated, final Section 819.19(b) allows the regulatory authority to determine highwall stability based on existing local conditions. In addition, the issue of subsidizing remining activities with monies from the AML fund is outside the scope of this rulemaking. However, OSM is in the process of examining this and other issues arising out of the relationship between Titles IV and V of the Act.

SECTION 819.21 - PROTECTION OF UNDERGROUND MINES.

New final Section 819.21 contains requirements for protection of underground mines. Proposed Section 816.108(e) was a continuation of previous Section 819.11(b) and provided that auger holes must not extend closer than 500 feet,

measured horizontally, to any abandoned or underground mine workings, except as approved in accordance with Section 816.79. OSM has adopted the proposed rule in final Section 819.21.

One commenter recommended that the proposed rule be eliminated since it requires an auger operator to get a second approval from the Mine Safety and Health Administration (MSHA) for drilling auger holes near underground mines, in addition to the MSHA approval required for such activity as part of the operator's ground-control plan under 30 CFR 77.1000 of the MSHA regulations. OSM has rejected this recommendation and retained the provision as proposed. Under 30 CFR 77.1000, the operator is required to establish and follow a ground-control plan that will be consistent with prudent engineering design and ensure safe working conditions. However, this MSHA regulation does not specify a distance between an auger hole and an active or abandoned minesite. Thus, retention of the reference to Section 816.79 in final Section 819.21 is consistent with the requirement in Section 515(b)(12) of the Act that an operator obtain special approval for surface mining within 500 feet from underground mines to prevent breakthroughs and protect the health and safety of underground miners.

Another commenter suggested that the word "abandoned" be deleted from the language of proposed Section 816.108(e). The commenter felt that coal recovery could be maximized by permitting augering near abandoned underground mines. OSM has rejected this suggestion. Section 816.79 does not prohibit mining near abandoned underground mines; it merely imposes special requirements if such mining is proposed.

CROSS REFERENCES

Certain cross references in these rules are to proposed rules that have not yet been finalized and which appear in Volume III of the "Final Environmental Impact Statement OSM EIS-1: Supplement," the availability of which is described below. If such other proposals are not adopted, a conforming technical amendment will be made to this rule.

III. PROCEDURAL MATTERS

Federal Paperwork Reduction Act

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

Executive Order 12291

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

Regulatory Flexibility Act

The DOI certifies that this document will not have a significant economic effect on a substantial number of small entities and therefore does not require a regulatory flexibility analysis under Public Law 96-354.

National Environmental Policy Act

OSM analyzed the impacts of these final rules in its "Final Environmental Impact Statement OSM-EIS-1: Supplement" according to Section 102(2)(C) of the National Environmental Policy Act of 1969, *42 U.S.C. 4332(c)(C)*. The final supplement is available in OSM's Administrative Record in Room 5315, 1100 L Street, N.W., Washington, D.C., or by mail request to Mark Boster, Chief, Branch of Environmental Analysis, Room 134, Interior South Building, U.S. Department of the Interior, Washington, DC 20240. This preamble serves as the record of decision under NEPA. To the extent that this rule differs from the preferred alternative published in Volume III of the EIS, it falls within the impacts and analysis discussed therein.

LIST OF SUBJECTS IN 30 CFR PART 819

Coal mining, Environmental protection, Surface mining.

For the reasons set forth in the preamble, Part 819, Chapter VII, Title 30 of the Code of Federal Regulations is amended as set forth herein.

Dated: March 24, 1983.

William P. Pendley, Acting Assistant Secretary, Energy and Minerals.

1. Part 819 is revised to read as follows:

PART 819 -- SPECIAL PERMANENT PROGRAM PERFORMANCE STANDARDS-AUGER MINING

Section

819.1	Scope.
819.11	Auger mining: General.
819.13	Auger mining: Coal recovery.
819.15	Auger mining: Hydrologic balance.
819.17	Auger mining: Subsidence protection.
819.19	Auger mining: Backfilling and grading.
819.21	Auger mining: Protection of underground mining.

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

SECTION 819.1 - SCOPE.

This part sets environmental protection performance standards for surface coal mining and reclamation operations involving auger mining.

SECTION 819.11 - AUGER MINING: GENERAL.

- (a) Auger mining operations shall be conducted in accordance with the requirements of Part 816 of this chapter, except as provided in this part.
- (b) The regulatory authority may prohibit auger mining, if necessary to --
 - (1) Maximize the utilization, recoverability, or conservation of the solid-fuel resource, or
 - (2) Protect against adverse water-quality impacts.

SECTION 819.13 - AUGER MINING: COAL RECOVERY.

- (a) Auger mining shall be conducted so as to maximize the utilization and conservation of the coal in accordance with Section 816.59 of this chapter.
- (b) Auger mining shall be planned and conducted to maximize recoverability of mineral reserves remaining after the operation and reclamation are complete.
- (c) Each person who conducts auger mining operations shall leave areas of undisturbed coal, as approved by the regulatory authority, to provide access for future underground mining activities to coal reserves remaining after augering is completed, unless it is established that the coal reserves have been depleted or are so limited in thickness or extent that it will not be practicable to recover the remaining coal. This determination shall be made by the regulatory authority upon presentation of appropriate technical evidence by the operator.

SECTION 819.15 - AUGER MINING: HYDROLOGIC BALANCE.

- (a) Auger mining shall be planned and conducted to minimize disturbances of the prevailing hydrologic balance in accordance with the requirements of Sections 816.41 and 816.42 of this chapter.
- (b) All auger holes, except as provided in Paragraph (c) of this section, shall be --
 - (1) Sealed within 72 hours after completion with an impervious and noncombustible material, if the holes are discharging water containing acid-or toxic-forming material. If sealing is not possible within 72 hours, the discharge shall

be treated commencing within 72 hours after completion to meet applicable effluent limitations and water-quality standards until the holes are sealed; and

(2) Sealed with an impervious noncombustible material, as contemporaneously as practicable with the augering operation, as approved by the regulatory authority, if the holes are not discharging water containing acid-or toxic-forming material.

(c) Auger holes need not be sealed with an impervious material so as to prevent drainage if the regulatory authority determines that --

(1) The resulting impoundment of water may create a hazard to the environment or public health or safety, and

(2) The drainage from the auger holes will --

(i) Not pose a threat of pollution to surface water, and

(ii) Comply with the requirements of Sections 816.41 and 816.42 of this chapter.

SECTION 819.17 - AUGER MINING: SUBSIDENCE PROTECTION.

Auger mining shall be conducted in accordance with the requirements of Section 817.121(a) and (c) of this chapter.

SECTION 819.19 - AUGER MINING: BACKFILLING AND GRADING.

(a) General. Auger mining shall be conducted in accordance with the backfilling and grading requirements of Sections 816.102 and 816.104-816.106 of this chapter.

(b) Remining. Where auger mining operations affect previously mined areas that were not reclaimed to the standards of this chapter and the volume of all reasonably available spoil is demonstrated in writing to the regulatory authority to be insufficient to completely backfill the highwall, the highwall shall be eliminated to the maximum extent technically practical in accordance with the following criteria:

(1) The person who conducts the auger mining operation shall demonstrate to the regulatory authority that the backfill, designed by a qualified registered professional engineer, has a minimum static safety factor for the stability of the backfill of at least 1.3.

(2) All spoil generated by the auger mining operation and any associated surface coal mining and reclamation operation, and any other reasonably available spoil shall be used to backfill the area. Reasonably available spoil shall include spoil generated by the mining operation and other spoil located in the permit area that is accessible and available for use and that when rehandled will not cause a hazard to the public safety or significant damage to the environment. For this purpose, the permit area shall include spoil in the immediate vicinity of the auger mining operation.

(3) The coal seam mined shall be covered with a minimum of 4 feet of nonacid-, nontoxic-forming material and the backfill graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability.

(4) Any remnant of the highwall shall be stable and not pose a hazard to the public health and safety or to the environment.

(5) Spoil placed on the outslope during previous mining operations shall not be distributed if such disturbances will cause instability of the remaining spoil or otherwise increase the hazard to the public health and safety or to the environment.

SECTION 819.21 - AUGER MINING: PROTECTION OF UNDERGROUND MINING.

Auger holes shall not extend closer than 500 feet (measured horizontally) to any abandoned or active underground mine workings, except as approved in accordance with Section 816.79 of this chapter.

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