

# **POSTMINING LAND USE**

## **Exceptions to Approximate Original Contour Requirements for Mountaintop Removal Operations and Steep Slope Mining Operations**

**Office of Surface Mining Reclamation and Enforcement**

**June 2000**



# United States Department of the Interior

OFFICE OF SURFACE MINING  
RECLAMATION AND ENFORCEMENT  
Washington, D.C. 20240

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To All Interested Parties:

I am enclosing a copy of our final policy clarifying allowable postmining land uses and related permitting requirements for mountaintop removal and steep slope mining operations that will not restore mined lands to their approximate original contour (AOC).

The policy document was made available in draft form for public comment in October 1999. Comments were received from citizen organizations, individuals, mining associations, industry, states, and other Federal agencies. These comments helped us refine the policy and ensure that the final document clearly explains our policy. A copy of our responses to the comments received is also enclosed.

In adopting the Surface Mining Control and Reclamation Act, Congress required that land be returned to its AOC in most instances. However, Congress also provided exceptions from this requirement when a community is in need of flat or gently rolling terrain to achieve certain postmining land uses such as industrial, commercial, or residential development or public facilities (airports, schools and hospitals, for example). The enclosed policy document clarifies the conditions under which these exceptions apply and the demonstrations that must be made before approval of such an exception.

Copies of the policy document may be obtained from the OSM home page, [www.osmre.gov](http://www.osmre.gov), or from Ed Carey, OSM, 3 Parkway Center, Pittsburgh, PA 15220: telephone 412-937-2907; E-mail [ecarey@osmre.gov](mailto:ecarey@osmre.gov).

Sincerely,

Kathrine L. Henry  
Acting Director

Enclosures

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## **I. INTRODUCTION AND SUMMARY**

### **A. The purpose of this paper.**

A general requirement under the Surface Mining Control and Reclamation Act (SMCRA) is that lands disturbed by mining must be reclaimed to their approximate original contour (AOC). 30 U.S.C. § 1265(b)(3). SMCRA creates limited exceptions to this requirement for mountaintop removal and steep slope mining operations, but operators wishing to take advantage of one of these exceptions must reclaim the mined land to a condition capable of supporting one of several allowable postmining land uses listed in SMCRA. 30 U.S.C. § 1265(c) (2) and (3) and 30 U.S.C. § 1265(e)(2). We have developed this paper to clarify the statutory and regulatory requirements relating to these postmining land uses.

As discussed in this document, when Congress enacted SMCRA, it chose to allow exceptions from AOC only in situations where beneficial postmining land uses could compensate for the adverse effects of not returning the land to AOC. These adverse effects include more and larger excess spoil fills being generated by mountaintop removal and steep slope mining operations. This overarching principle of compensation is also reflected in the Office of Surface Mining's (OSM) alternative postmining land use regulations which impose a higher and better use reclamation standard on mountaintop removal and steep slope mining operations. Two corollaries arise from the principle of compensation: (1) a postmining land use cannot be approved where the use could be achieved without waiving the AOC requirement, except where it is demonstrated that a significant public or economic benefit will be realized therefrom; and, (2) where an exception or variance from the AOC requirement is sought, the postmining land use must always offer a net benefit to the public or the economy.

### **B. Background principles established by SMCRA.**

SMCRA establishes requirements for the regulation of surface coal mining and reclamation operations and for the restoration of abandoned mine lands. Through these requirements, Congress sought to establish requirements that would minimize the effects of mining. One of the most important of these is the general requirement that disturbed lands be reclaimed to AOC. Pursuant to Subsection 515(b)(3), mine operators must "backfill, compact \* \* \*, and grade in order to restore the approximate original contour of the land with all highwalls, spoil piles, and depressions eliminated." 30 U.S.C. § 1265(b)(3).

At the same time, Congress also recognized that alternatives to AOC might be justified when certain beneficial postmining land uses would result from the mining operation. These beneficial land uses could compensate for the effects of mountaintop removal and steep slope mining and for not returning the land in question to AOC. For example, in mountainous Appalachia, large-scale surface coal mining operations present an opportunity to create relatively flat, flood-free

land capable of supporting residential and industrial development and other valuable land uses. To take advantage of this opportunity, Congress included provisions in SMCRA to allow exceptions to the AOC restoration requirement. Under section 515(c) of the Act, 30 U.S.C. § 1265(c), mountaintop removal operations, if approved, are exempt from the AOC restoration requirements, and, under section 515(e) of the Act, 30 U.S.C. § 1265(e), steep slope mining operations may seek a variance from those requirements.

Although mountaintop removal and steep slope variance operations create the opportunity for flat land, there is a significant downside to these operations – the larger valley fills that they produce when compared to AOC reclamation. Even when land is returned to AOC, some excess spoil material is created that must be disposed of in fills. The reason for this is that, during the mining process, excavated material swells due to the creation of voids.<sup>1</sup> However, when a site is not returned to AOC, a substantially greater amount of excess spoil is generated, all of which must be placed off the mine bench or mountain. This additional excess spoil causes significantly more disturbances to natural areas and water courses due to the creation of larger fills and the altering of more stream valleys. Because mining operations with AOC variances usually cause greater disturbances by generating more excess spoil for fills than those without AOC variances, it is important to limit their occurrence to situations where beneficial postmining land uses offer real compensation for the effects of not returning the land to AOC.

Congress considered both the benefits of and the liabilities for mountaintop removal and steep slope mining when it imposed three sets of requirements to prevent the misuse of the exceptions as a means of avoiding reclamation responsibilities and to ensure that significant economic or public benefit would result from these operations.

First, it established a general requirement that acceptable postmining land uses for mountaintop removal and steep slope mining variance operations must constitute \* \* \* **equal or better economic or public use[s]** of the land.<sup>2</sup> 30 U.S.C. § 1265(c)(3)(A), 1265(e)(3).

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<sup>1</sup>The soil and rock not needed to return a mined out area to AOC is called excess spoil. One easy way to envision this excess spoil phenomenon is to think of what happens when plowing a garden. Plowing soil produces smaller, irregularly shaped pieces separated by voids or air pockets. Because the plowed soil no longer fits together as compactly as it once did, the overall volume of the soil is increased. For that reason, the ground level after plowing is always higher than it was before. Similarly, mining breaks up solid rock layers and creates voids, causing the overall volume of the material to increase. This phenomenon is known in the mining industry as bulking, or swell. Excess spoil is the material produced by swell.

<sup>2</sup> The general requirement for a mountaintop removal variance is that the proposed post-mining land use must constitute an equal or better economic or public use of the affected land, as compared with premining use . . . 30 U.S.C. § 1265(c)(3)(A). For steep slope operations, a general requirement is that the potential use of the affected land must constitute an "equal or better economic or public use." 30 U.S.C. § 1265(e)(3).

Second, Congress specified the types of beneficial land uses that would be acceptable for each type of mining. SMCRA section 515(c)(3), 30 U.S.C. § 1265(c)(3), allows the regulatory authority to approve mountaintop removal operations only in cases where an **industrial, commercial, agricultural, residential or public facility (including recreational facilities) use** is proposed for the postmining land use of the affected land." (Emphasis added.) SMCRA section 515(e)(2), 30 U.S.C. § 1265(e)(2), allows the regulatory authority to approve variances from AOC restoration requirements for operations on steep slopes only for an **industrial, commercial, residential, or public use (including recreational facilities).**" (Emphasis added.)

Third, Congress specified specific approval criteria for both mountaintop removal mining and steep slope mining operations. An applicant must address these criteria in the permit application. A regulatory authority must use these criteria when evaluating the information submitted by an applicant for a mountaintop removal permit or a request for an AOC variance for steep slope mining operations.

An applicant for a mountaintop removal operation must provide appropriate assurances that the use will be:

- (i) compatible with adjacent land uses;
- (ii) obtainable according to data regarding expected need and market;
- (iii) assured of investment in necessary public facilities;
- (iv) supported by commitments from public agencies where appropriate;
- (v) practicable with respect to private financial capability for completion of the proposed use;
- (vi) planned pursuant to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the postmining land use; and
- (vii) designed by a registered engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site.

30 U.S.C. § 1265(c)(3)(B).

An applicant for a variance from AOC for a steep-slope mining operation must include a request in writing from the owner of the property as part of the permit application; the watershed of the

area must be improved; the proposed use must be designed and certified by a qualified registered professional engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site; and only such amount of spoil may be placed off the mine bench as is necessary to achieve the planned postmining land use. 30 U.S.C. § 1265(e)(1) through (e)(4).

Taken together these provisions manifest a clear intention on the part of Congress to ensure that the proposed postmining land use is likely to afford some significant benefit either from a public policy or an economic standpoint in compensation for not returning the land to AOC. Because Congress made restoration to AOC a key element of SMCRA and allowed deviation from this standard only in limited situations and under certain prescribed conditions, OSM finds ample basis for its policy that any loss of AOC must be compensated for in the resulting postmining land use. All proposed postmining land uses should be judged against this overarching principle.

We codified our interpretation of the relationship between paragraphs (b)(2), (c), and (e) of section 515 of the Act by adopting regulations requiring that mountaintop removal and steep slope mining operations seeking AOC variances comply with pertinent provisions of 30 CFR 816.133. Under 30 CFR 785.14(c)(1)(ii), mountaintop removal operations must comply with the alternative postmining land use requirements of 30 CFR 816.133(a) through (c). Under 30 CFR 785.16(a)(2) and 816.133(d)(2), steep slope mining operations must comply with the alternative postmining land use requirements of 30 CFR 816.133(c) to obtain a variance from AOC restoration requirements. Like section 515(b)(2) of the Act, paragraphs (a) and (c) of 30 CFR 816.133 specify that the only acceptable *alternative* postmining land uses are those that are higher or better than the premining uses. Hence, the only acceptable postmining land uses for purposes of obtaining an exception from the AOC restoration requirements are those which are both higher or better than the premining use and are an equal or better economic or public use, compared with the premining uses. This does not mean that a proposed postmining land use cannot belong to the same general category as the premining use (e.g., forestry premining use/forestry postmining use). It does mean, however, that the postmining use must represent an added benefit from either a public or economic standpoint. Therefore, rather than being merely forestry/forestry, with an added benefit from either a public or economic standpoint it would be forestry premining use/commercial forestry postmining use. Any allowable postmining land uses or subcategories thereof would have to be part of the approved program prior to being authorized by the regulatory authority. (48 FR 39893; September 1, 1983).

In 30 CFR 701.5, we define *higher or better uses* as meaning postmining land uses that have a higher economic value or nonmonetary benefit to the landowner or the community than the premining land uses. There is no definition or explanation of *equal or better economic or public use* in either the statute or our regulations.

The following table summarizes the interaction of the *equal or better economic or public use* requirement with the requirement for compliance with the alternative postmining land use regulations (*higher or better use*). Under paragraphs (c)(3)(A) and (e)(3)(A) of section 515 of

SMCRA, 30 CFR 785.14(c)(1)(i) and (ii), and 30 CFR 816.133(d)(2) and (4), an applicant for a mountaintop removal operation or a steep slope mining operation seeking a variance from approximate original contour restoration requirements must meet both of these postmining land use standards.

<b>Approvable Postmining Land Uses</b>	
<i>When the proposed postmining use, compared with the premining use, is . . .</i>	<i>. . . does the proposed postmining use meet the threshold for an exception from the requirement for restoration to approximate original contour?</i>
A lesser economic use	Only if the proposed use also is (1) a better public use or (2) an equal public use with a higher nonmonetary benefit to the landowner
An equal economic use	Only if the proposed use also would provide a higher nonmonetary benefit to the landowner or community
A better economic use	Yes (assumes better economic use is synonymous with higher economic value to the landowner or community)
A lesser public use	Only if the proposed use also is (1) a better economic use or (2) an equal economic use with a higher nonmonetary benefit to the landowner
An equal public use	Only if the proposed use also would provide (1) a higher economic value to the landowner or community or (2) a higher nonmonetary benefit to the landowner
A better public use	Yes (assumes better public use is synonymous with higher nonmonetary benefit to the community)

As we stated above, as an overarching principle of the Act, exceptions from the AOC requirements are allowed only in situations where beneficial postmining land uses could compensate for the effects of not returning the land to its AOC. The two resulting consequences that arise from this overarching principle are discussed below.

- 1. A postmining land use will not be approved where the use could be achieved without waiving the AOC requirement, except where it is demonstrated that a significant public or economic benefit will be realized therefrom.**

A major criterion that can be used in assessing the appropriateness of postmining land uses is whether the use can be achieved without an exception or variance from the AOC requirements, or, put another way, whether the proposed postmining land use is one for which flat land or



rolling terrain is necessary. Early versions of SMCRA made this criterion *the* dispositive factor in assessing the appropriateness of proposed postmining land uses: they expressly limited approved postmining land uses for mountaintop removal operations to those that could not be achieved without an exception from the AOC requirement. *See, for example*, H.R. CONF. REP. NO. 93-1522 (1974). The 95<sup>th</sup> Congress, however, ultimately deleted this flat land necessity requirement as too restrictive. H.R. REP. NO. 95-218, at 67 (1977).<sup>3</sup> When Congress removed this provision, it did not intend to eliminate consideration of the need for flat or rolling terrain as *an important criterion* that regulatory authorities should use in determining whether proposed postmining land uses are appropriate. Significantly, the 1977 House report we have just cited also includes a discussion, taken from earlier reports, that uses the need for flat land as a criterion for disfavoring certain low-intensity postmining land uses:

It should be noted that pasture, grassland, and similar agricultural land uses are not considered intensive uses by the committee. Such agricultural activities can be conducted on reclaimed mine slopes without requiring variances from the approximate original contour and spoil placement standards.

H.R. REP. NO. 95-218, at 109 (1977).

Therefore, while the need for flat or rolling terrain should not be the exclusive test used to assess proposed postmining land uses, regulatory authorities may use it as an important criterion in their deliberations. Where the postmining use is proposed to belong to the same general category (e.g., premining forestry, postmining commercial forestry), the operation should substantially improve the ability of the land to achieve the proposed postmining use.

**2. Where an exception or variance from AOC requirements is sought, the postmining land use must always offer a net benefit to the public or the economy.**

As mentioned above, a general requirement under SMCRA for postmining land uses in connection with both mountaintop removal and steep slope mining operations is that the proposed postmining land use must constitute an *equal* or better economic or public use. *See* 30 U.S.C. §§ 1265(c)(3)(A) and (e)(3) (emphasis added). While the meaning of *better use* is fairly clear, the meaning of *equal* warrants clarification. Taken in context, we think the word *equal* means that approvable postmining land use may sometimes fall into the same general land use category as the premining land use, but only if there will be significant improvement to the site that offers a net benefit to the economy or the public. For example, a premining forestry use may be proposed as a postmining commercial forestry use. For several reasons, we do not think that

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<sup>3</sup> The 95th Congress did place a different but somewhat analogous restriction on AOC variances for steep slope mining operations. Section 515(e)(4) of SMCRA and 30 CFR 816.133(d)(8) and 817.133(d)(8) require that the regulatory authority limit those variances to the amount of spoil necessary to achieve the planned postmining land use.

Congress, in using the word *equal*, intended to allow operators to restore a site to an unimproved condition which, except for its now-flattened configuration, is essentially the same as its premining state.

The first reason for this conclusion is that, in SMCRA, Congress prescribed the AOC as the normative postmining reclamation standard. 30 U.S.C. § 1265(b)(3). Congress also prescribed those limited conditions under which an exception could be granted to the AOC restoration requirement in exchange for some beneficial postmining result. A postmining land use on a flattened and *unimproved* site can never really be *equal* ... as compared with premining use because the loss of the original contour has not been compensated for in the postmining use. To allow an unimproved postmining result, different from the premining conditions in only one respect—that the AOC has been lost—would render the intent of Congress that the AOC restoration be the standard for surface mining to have no meaning or effect whatsoever. In light of the importance placed on restoration to the AOC in SMCRA, we cannot conclude that Congress intended such a result. Consequently, on such sites the postmining land use can be rendered *equal* to the premining use only if the proposed postmining use compensates for not returning the site to AOC. In other words, for a postmining use of a flattened site to be *equal* to the premining use of the site there must always be some improvement to, or new benefit resulting from, the site after mining.

Second, as explained earlier in this paper, the other postmining land use criteria in SMCRA for both mountaintop removal mining and steep slope mining operations manifest a clear concern that postmining land uses be likely to afford significant benefit either from a public policy or an economic standpoint. Section 515(c)(3)(B), 30 U.S.C. § 1265(c)(3)(B), requires that regulatory authorities examine the feasibility of a proposed postmining land use, the market need for the use, and the availability of financing. Section 515(e)(3), requires, among other things, an improvement of the affected watershed. These requirements, when read together, indicate that the acceptable postmining land uses for mountaintop removal mining and steep slope operations will take planning, work, and significant expenditure to effect. They also indicate that approved postmining land uses should result in some type of public or economic benefit. Interpreting the word *equal* to allow a postmining land use that is merely an unimproved version of the premining land use would run counter to both sets of provisions.

A third reason for this conclusion is our understanding that Congress wished to include all postmining land uses that could afford a significant public or economic benefit. If Congress had required that mountaintop removal and steep slope sites always be restored to a better economic or public use, such a provision might have been misconstrued as a requirement that the sites had to be put to a completely different category of use after mining. Congress used the term *equal* in recognition that it sometimes might be beneficial to the public or to the economy to restore a site to an improved version of its premining land use.

Consequently, an approvable postmining land use, say agriculture, may fall into the same general land use category as the premining land use, but only if there will be significant improvements to

the site that offer a net benefit to the economy or the public. In accordance with this understanding, the Federal regulations at 30 C.F.R. § 785.14(c)(1)(ii) and 785.16(a)(2) provide that applicants for exceptions from the AOC restoration requirement must demonstrate compliance with the alternative postmining land use requirements of 30 C.F.R. § 816.133(c). One example of such an alternative would be a premining use of unmanaged forest that may or may not be harvested for timber being replaced by a postmining commercial forest that is carefully managed to produce higher yields of better timber. Another example of such an alternative would be going from an undeveloped, steep slope, sparsely forested premining condition that provides limited recreational benefit to a postmining land use of commercial forestry with developed recreational facilities for public use. After mining, the steep terrain would be reclaimed creating a relatively flat plateau with unconsolidated soil material and gently rolling contours to enhance the growth and harvesting of commercial species for an identified forest product and to provide public recreational facilities. Such recreational facilities must be accessible to the public and would require structures or developments such as picnic shelters, boat ramps, developed trails, and rest rooms to support such uses. Less intensive recreational uses such as bird watching and hiking would also require developed facilities such as trails and rest rooms. These public recreational uses would provide a significant public benefit, while the harvesting of the commercial tree species would provide a significant economic benefit to the community by providing jobs and a valuable forest product.

### **3. Conclusion**

After carefully reviewing SMCRA, the legislative history and the implementing regulations, we have determined that there is sufficient basis for the interpretation that postmining land uses for mountaintop removal and steep slope mining operations with an AOC variance must incorporate an added public or economic benefit in order to justify receiving an exception to the Act's AOC restoration requirements. This conclusion is supported by the importance Congress placed on restoration to AOC when it mandated AOC as the standard for all mining operations except in limited and prescribed circumstances. Furthermore, we find support in the applicability of the higher and better use requirement in OSM's alternative postmining land use regulations.

## **II. WHAT ARE THE CRITERIA FOR AN EXCEPTION TO THE AOC RESTORATION REQUIREMENT?**

### **A. What do our regulations require?**

Our regulations (30 CFR 785.14 and Part 824 for mountaintop removal operations and 30 CFR 785.16 and 816.133(d) for steep slope mining operations) generally parallel the statutory requirements, with a few additions and clarifications. The principal difference is the addition of

language clarifying that the alternative postmining land use requirements of 30 CFR 816.133 apply to mountaintop removal operations and steep slope mining operations seeking an exception from the AOC restoration requirement. Also, in 30 CFR 785.16(a)(3), we have added criteria for determining when a proposed steep slope mining operation will be deemed to improve the watershed.

## **B. Which Postmining Land Uses Qualify?**

SMCRA and OSM's regulations list the types of postmining land uses that qualify for an exception to the AOC restoration requirements for mountaintop removal and steep slope mining operations. For an exception to the AOC restoration requirement for mountaintop removal operations, the postmining land use must be industrial, commercial, agricultural, residential or public facility (including recreational facilities). The requirements for variances to the AOC requirement for steep slope mining operations are the same, except that Congress excluded agricultural from the list and used the term public use rather than public facility.

For a postmining land use to qualify for an exception to the AOC restoration requirements, it must be one of the land uses enumerated in SMCRA and the regulations. Although forestry is not one of the explicitly authorized postmining land uses, forestry may qualify for an exception to AOC requirements as an agricultural use at a mountaintop removal operation. Fish and wildlife habitat cannot qualify in and of itself as a basis for an exception to AOC requirements. However, ponds and wetlands might play a supporting role in the development of a facility that does qualify for an exception to AOC requirements under the authorized public facility use.

This paper is designed to provide guidance in granting exceptions to the AOC requirements where regulatory authorities need clarification. Hence, its organization and content reflect this need by including discussion of those land use categories that have proved difficult to interpret consistently. Below, we briefly state how specific land uses do or do not qualify for an AOC exception, while further detailed explanation follows in Section C.

### Forestry

Forestry can be approved as an agricultural postmining land use for mountaintop removal permits. However, forestry cannot be approved as a postmining land use for a steep slope mining operation with an AOC variance. (See section III. B. below.)

### Agriculture

For mountaintop removal operations, agriculture is an approvable postmining land use. Although forms of low-intensity, low-maintenance agricultural activities such as grazing and pastureland may be authorized, such uses are discouraged. (See section III.C. below.)

For steep slope mining operations, agriculture cannot be approved as a postmining land use for an AOC variance.

#### Fish and wildlife habitat

Fish and wildlife habitat (in and of itself) cannot be approved for mountaintop removal operations nor for steep slope mining operations with an AOC variance. It could, however, under certain circumstances, play a supporting role as part of an approved postmining land use, such as public facility. (See section III. A. below.)

#### Public facility use or public use

SMCRA lists public facility as a postmining land use for mountaintop removal operations. However, the Act uses the term public use when listing acceptable postmining land uses for an AOC variance for steep slope mining operations. These two terms should be interpreted as having identical meanings. (See section III. A. below.)

#### Commercial

Commercial operations would include retail or trade of goods or services, including hotels, motels, stores, restaurants, and other commercial establishments.

This use applies to both mountaintop removal and steep slope mining operations with an AOC variance.

#### Industrial

Industrial operations would include heavy and light manufacturing facilities, production of materials for fabrication, and storage of products.

This use applies to both mountaintop removal and steep slope mining operations with an AOC variance.

#### Residential

Residential areas would include land used for single and multiple-family housing, mobile home parks, or other residential lodgings.

This use applies to both mountaintop removal and steep slope mining operations with an AOC variance.

### **C. What are the Permitting Requirements?**

The following requirements apply only to those lands which are granted an exception from the AOC requirements for mountaintop removal operations, or a variance from the AOC requirements for steep slope mining operations. Section 515(c)(3) of SMCRA and 30 CFR 785.14(c) establish criteria for approval of permits for mountaintop removal operations. Section 515(e) of SMCRA and 30 CFR 785.16(a) and 816/817.133(d) establishes criteria for the authorization of variances from the requirement to restore AOC for steep slope mining operations. Under paragraphs (c)(1) and (e)(1) of section 515 of SMCRA, States have the option of deciding whether to include provisions for mountaintop removal operations and AOC variances for steep slope operations in their programs. However, if a State decides to authorize these types of operations, its regulatory program must include permit application requirements and review and approval criteria consistent with the Federal provisions cited above.

This document describes procedures for granting exceptions to AOC requirements for certain postmining land uses. Section III discusses the three land uses which have been most confusing relative to mountaintop removal: (1) public facility, including a discussion of fish and wildlife habitat; (2) forestry; and (3) agricultural use in general. Section IV addresses the provisions for steep slope mining operations, which differ from those applicable to mountaintop removal. The postmining land uses commercial, industrial, and residential, although enumerated in SMCRA and the regulations, are not specifically addressed in this document. However, the requirements for these land uses would be similar to those provided.

#### **D. Are there any special bond release requirements?**

There are no bond release requirements unique to mountaintop removal operations or steep slope operations with an AOC variance. There is no requirement, either in SMCRA or the regulations, that postmining land uses be implemented immediately following mining. To obtain full bond release, the permittee must demonstrate successful completion of all reclamation requirements of the permit and regulatory program. 30 CFR 800.40(c)(3). Under 30 CFR 816.133(a), one of those requirements is restoration of all disturbed areas to conditions *capable* of supporting the approved postmining land use. For mountaintop removal operations, the permittee must demonstrate adherence to the schedule approved as part of the reclamation plan, including installation of any infrastructure for which the permittee is responsible under that plan. In addition, Section 515(c)(2) of SMCRA describes mountaintop removal operations as creating sites that are *capable* of supporting postmining land uses (emphasis added) in accordance with the requirements of the Act.

### **III. AOC EXCEPTION REQUIREMENTS FOR MOUNTAINTOP REMOVAL OPERATIONS**

#### **A. Public facility use, with a discussion of fish and wildlife habitat.**

There is some confusion in understanding the difference, if any, of term public facility as set forth in SMCRA at section 515(c)(3), and the term public use as set forth at section 515(e). Both of these terms refer to public facilities. They appear in similar contexts and neither the statute nor its legislative history provides any indication that Congress intended that these terms have different meanings. Therefore, we will use them synonymously.

The land use category of fish and wildlife habitat is defined at 30 CFR 701.5 under the definition of Land use as land dedicated wholly or partially to the management of species of fish or wildlife. Neither SMCRA at section 515(c)(3) nor the implementing Federal regulations at 30 CFR 785.14(c)(1) authorizes fish and wildlife habitat, as a qualifying postmining land use for mountaintop removal mining operations. Therefore, a permit for mountaintop removal mining operations cannot be approved with a postmining land use of fish and wildlife habitat. However, when fish and wildlife habitat features such as ponds and wetlands are to be created as part of a public recreational facility, they may play a supporting role in obtaining an exception from the AOC restoration requirements. This is consistent with the Federal regulations at 30 CFR 816.97 concerning the protection of fish and wildlife habitat and related environmental values. 30 CFR 816.97 encourages the enhancement of fish and wildlife habitat in all postmining land uses.

Neither SMCRA nor our regulations define public use or public facility use. However, when OSM revised its definition of land use at 30 CFR 701.5 (September 1, 1983, 48 FR 39892, 39893), OSM stated that a use is a public use if it involves benefit, utility, or advantage to the public generally or any part of the public, as distinguished from benefitting an individual or a few specific individuals. The term public facility (including recreational facilities), implies structures or other significant developments that the public is able to use, or that confer some type of public benefit. Depending upon individual circumstances, this term may include schools, hospitals, airports, reservoirs, museums, and developed recreational sites such as picnic areas, campgrounds, ballfields, tennis courts, fishing ponds, equestrian and off-road vehicle trails, and amusement areas, together with any necessary supporting infrastructure such as parking lots and rest facilities. In general, we expect those sites with a public or public facility postmining land use will provide the public with access as a matter of right on a non-profit basis. Facilities that meet a public need, like water supply reservoirs and publicly owned prisons, and facilities that provide a benefit, like flood control structures and institutions of higher education, also qualify, even if they are not readily accessible to all members of the public or completely non-profit.

However, a public facility does not include land used for private purposes, such as a private hunting club, because the Act and regulations provide that only public recreational facilities qualify a site for an exception to the AOC restoration requirements.

With these ideas in mind, we would expect that approval of a public facility (including recreational facilities) postmining land use for an AOC variance for mountaintop removal mining operations permit would require the following:

**1. Consultation with the appropriate land use planning agencies, if any, to determine if the proposed postmining land use constitutes an equal or better economic or public use of the affected land, as compared with the premining use. [SMCRA §515(c)(3)(A); 30 CFR 785.14(c)(1)(i)]**

As with any postmining land use, exceptions to the standards of AOC should only be granted where it is demonstrated that such exceptions result in an equal or better public or economic use for which some long-term and significant public benefit will be derived. Many recreational uses can be conducted on steep slopes that have been regraded to AOC. Therefore, it is not expected that many permits would be granted for the public facility (including recreational facilities) postmining land use. However, through consultations with appropriate land use planning agencies, the regulatory authority may identify cases where the public would be well served if the land were reclaimed to a public facility (including recreational facilities) postmining land use. These consultations will assist the regulatory authority in determining if there is a public benefit derived from the resulting post mining land use. The regulatory authority should insure that the land use agencies are fully aware of the mining operations and reclamation plan and the proposed post mining contours and land use. The permit application should discuss the potential economic and environmental impacts of the proposed operation to assist the regulatory authority in making this determination even in the absence of any appropriate State or local planning agencies.

**2. The applicant must present specific plans for the proposed postmining land use and assurances that such use will be:**

**(i) Compatible with adjacent land uses. [SMCRA §515(c)(3)(B)(i); 30 CFR 785.14(c)(1)(iii)(A)]**

Here, the regulatory authority should require the submittal of documentation that compatibility has been determined through compliance with planning, zoning, and subdivision ordinances at the local and State level. Transcripts of all pertinent public meetings and hearings pertaining to the permit application should be required. The regulatory authority should ensure that any necessary approvals (e.g., zoning) are received prior to approving a postmining land use. The permit application should discuss the potential impacts of the proposed mining operations on adjacent land uses, even in the absence of any appropriate State or local planning or zoning ordinances.

**(ii) Obtainable according to data regarding expected need and market. [SMCRA §515(c)(3)(B)(ii); 30 CFR 785.14(c)(1)(iii)(B)]**

Here, the regulatory authority should require specific demographic data and a market analysis which demonstrate a need for and the feasibility of a public facility (including recreational facilities) postmining land use. The data and analysis should clearly document such things as a lack of other adequate, and similar public facilities of the proposed type nearby, and the expected public use of the proposed facility. The data and analysis should be sufficiently detailed as to



allow the regulatory authority to determine the feasibility of the post mining land use and ensure a public benefit is identified and can be obtained.

**(iii) Assured of investment in necessary public facilities.** [SMCRA §515(c)(3)(B)(iii); 30 CFR 785.14(c)(1)(iii)(C)]

Here, the regulatory authority should require evidence such as letters, and other supporting documents showing how appropriate local, county, regional, state, or Federal agencies intend to develop or support the proposed public facility (including recreational facilities) postmining land use. This would include commitments, where appropriate, related to the development of access roads, structures, and adequate utilities such as water, storm water and sewage control, etc.

**(iv) Supported by commitments from public agencies where appropriate.** [SMCRA §515(c)(3)(B)(iv); 30 CFR 785.14(c)(1)(iii)(D)]

Here, the regulatory authority should require documented evidence that appropriate agencies concur with the proposed public facility (including recreational facilities) land use and will provide the necessary reviews, advice, and support for development and implementation of the postmining land use. For example, support may be needed from agencies such as a Bureau of Fish and Wildlife, or Bureau of Forestry for advice and concurrence related to park and recreation land designs. In addition, commitments of support may be needed for police protection, future maintenance of roads, structures and utilities, fire protection, etc.

**(v) Practicable with respect to private financial capability for completion of the proposed use.** [SMCRA §515(c)(3)(B)(v); 30 CFR 785.14(c)(1)(iii)(E)]

Here, the regulatory authority should require documentation which indicates a reasonable expectation that private financing, if appropriate, of the public facility (including recreational facilities) postmining land use would be available. Such documentation could consist of letters of commitment by interested parties. However, financial contracts, while desirable, would not be necessary to fulfill the intent of this requirement.

**(vi) Planned pursuant to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the postmining land use.** [SMCRA §515(c)(3)(B)(vi); 30 CFR 785.14(c)(1)(iii)(F)]

Here, the regulatory authority should require the details of how the specific plans for the postmining land use will be incorporated into the mining and reclamation operations. The schedule could serve to identify when the structures, utilities, and drainage controls would be constructed. The specific plans and schedule submitted must provide sufficient detail to allow the regulatory authority to assess whether the proposed public facility (including recreational facilities) postmining land use is obtainable, practicable, and reasonable.

**(vii) Designed by a registered engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use.** [SMCRA §515(c)(3)(B)(vii); 30 CFR 785.14(c)(1)(iii)(G)]

Here, the registered engineer must ensure that the design will assure the stability, drainage, and configuration of the reclaimed land necessary for the intended public facility use.

**3. The applicant demonstrates compliance with the requirements for acceptable alternative postmining land uses in 30 CFR 816.133(a) through (c).** [30 CFR 785.14(c)(1)(ii)]

Under 30 CFR 816.133(a), a permittee must restore all disturbed areas to a condition capable of supporting either their premining uses or higher or better uses. Since 30 CFR 785.14(c)(1)(ii) incorporates the *alternative* postmining land use requirements of 30 CFR 816.133(a)-(c), restoration to conditions solely capable of supporting the premining uses is not an option for mountaintop removal operations. Instead, the permit application must propose higher or better postmining land uses, which are defined in 30 CFR 701.5 as those uses that have a higher economic value or nonmonetary benefit to the landowner or the community than the premining land uses. As discussed in Part II of this document, this requirement applies in addition to, not in place of, the requirement in 30 CFR 785.14(c)(1)(i) that the postmining land use be an equal or better economic or public use compared to the premining use.

Paragraph (b) of 30 CFR 816.133 pertains to determination of premining uses. Since it contains no requirements unique to alternative postmining land uses, we are not discussing it here.

Paragraph (c) of 30 CFR 816.133 provides that alternative postmining land uses must meet certain criteria. Specifically, the permit application must demonstrate that:

- (1) There is a reasonable likelihood for achievement of the proposed use.
- (2) The proposed use does not present any actual or probable hazard to the public health and safety, or threat of water diminution or pollution.
- (3) The proposed use is not impractical or unreasonable.
- (4) The proposed use is consistent with applicable land use policies or plans.
- (5) There will be no unreasonable delay in implementation of the proposed use.
- (6) The proposed use will not cause or contribute to a violation of Federal, State, or local law.

The fourth criterion duplicates the requirements of 30 CFR 785.14(c)(1)(iv), so the application need not contain any additional information to satisfy that requirement. Information submitted in

response to 30 CFR 785.14(c)(1)(iii) also may be useful in demonstrating compliance with the remaining criteria of 30 CFR 816.133(c). However, those criteria are not identical with the requirements of 30 CFR 785.14(c)(1)(iii), nor are they subsets of those requirements. Therefore, the application will need to include the additional economic, environmental, and other information necessary to demonstrate compliance with those criteria.

Determinations of reasonableness or practicality are judgment calls on the part of the regulatory authority. Consultation with land use planning and zoning agencies may assist the regulatory authority in making these determinations.

Finally, under 30 CFR 816.133(c), the regulatory authority must consult with the landowner or land management agency with jurisdiction over the lands in the proposed permit area. The decision record must include documentation of this consultation and the consideration given to any comments received.

**4. Federal, State, and local government agencies with an interest in the proposed land use must have an adequate period in which to review and comment on the proposed use. [30 CFR 785.14(c)(1)(v)]**

These comments, and the required consultations with appropriate land use planning agencies, surface landowners, and State environmental agencies will be essential to the regulatory authority in making the judgements and determinations under these provisions.

**B. Forestry.**

The term *Forestry* is defined under *Land use* in the Federal regulations at 30 CFR 701.5 as *Land used or managed for the long-term production of wood, wood fiber, or wood-derived products.* Neither SMCRA nor the Federal regulations specifically designate forestry as an approved post mining land use for sites granted an exception from the AOC requirements. However, we have recognized forestry as an agricultural post mining land use since 1983 (September 1, 1983; 48 FR39893). The preamble to our 1983 rulemaking revising the definition of land use in 30 CFR 701.5 discusses the relationship of the land uses listed in section 515(c)(3) of the Act to the land use categories in the definition. Specifically, the preamble states that: *Agricultural use is interpreted as including cropland, pastureland or land occasionally cut for hay, grazingland, and forestry.* Therefore, forestry can be approved for mountaintop removal operations on the condition that it results in a long term and significant public or economic benefit. However, because section 515(e) of the Act does not include *agriculture* in the list of approvable postmining land uses, forestry is not allowed for steep slope mining operations with AOC variances. A permit application with forestry as a postmining land use for a mountaintop removal operation would have to include the following:

**1. Consultation with the appropriate land use planning agencies, if any, to determine if the**

**proposed postmining land use constitutes an equal or better economic or public use of the affected land, as compared with the premining use.** [SMCRA §515(c)(3)(A); 30 CFR 785.14(c)(1)(i)]

As with any postmining land use, exceptions to the standards of AOC should only be granted where it is demonstrated that such exceptions result in an equal or better public or economic use from which some long term public benefit will be derived. A comprehensive, realistic forest management plan should accompany any mountaintop removal permit application based on a postmining land use of forestry. The regulatory authority should seek the advice of the land use planning agencies in determining if the management plan will insure an equal or better economic or public use of the land. The regulatory authority should insure that the land use agencies are fully aware of the mining operations and reclamation plan and the proposed postmining contours and land use. The permit application should discuss the potential economic and environmental impacts of the proposed operation to assist the regulatory authority in making this determination even in the absence of any appropriate State or local planning agencies.

In addition, the regulatory authority could determine whether appropriate agencies concur with the proposed forestry postmining land use, and will provide any necessary reviews, advice, and support for development and implementation of the postmining land use. For example, support may be needed from agencies including but not limited to a Bureau of Forestry or a Bureau of Conservation for advice and concurrence related to tree species, landscape designs, and for erosion and sedimentation control measures.

**2. (a) The applicant must present specific plans for the proposed postmining land use.** [SMCRA §515(c)(3)(B); 30 CFR 785.14(c)(1)(iii)]

The regulatory authority should insure that the applicant provides a credible forest management plan prepared by a professional forester who is fully cognizant of the final site configuration. The forest management plan must discuss the proposed mining and reclamation activities and their impact on tree establishment and growth, and should also discuss the planting, maintenance and harvesting of the forest product. The forest management plan should include periodic evaluation of the stand for disease and insect infestation and treatment if necessary, thinning, fire control, erosion control, soil supplements, control of competing species, harvesting, reforestation, and transportation of the final product.

The regulatory authority should also provide a copy of the management plan to the appropriate state agency qualified to assess the validity of the plan, i.e., Bureau of Forestry. This agency should be charged with reviewing the technical aspects of the plan to insure that: 1) the species planted is suitable for the postmining land use, 2) the plan provides all steps necessary for the landowner to protect the stand, and 3) the plan will allow efficient harvest of the timber.

The State agency should further review the plan to determine whether the species proposed to be planted on the postmining site will produce a sufficient yield to insure the success of the

proposed market use.

**(b) The applicant also provides appropriate assurances that the proposed postmining land use will be:**

**(i) Compatible with adjacent land uses.** [SMCRA §515(c)(3)(B)(i); 30 CFR 785.14(c)(1)(iii)(A)]

In addition to requiring a showing of compliance with all local ordinances and zoning requirements, the regulatory authority should insure that there are no adjacent land uses that will make growing or harvesting of forest products impractical. Transcripts of all pertinent public meetings and hearings pertaining to the permit application should be required, if such pertinent transcripts exist. The responsibility for making the compatibility determination rests with the regulatory authority, not any other governmental entity. The permit application should discuss the potential impacts of the proposed mining operations on adjacent land uses, even in the absence of any appropriate State or local planning or zoning ordinances.

**(ii) Obtainable according to data regarding expected need and market.** [SMCRA §515(c)(3)(B)(ii); 30 CFR 785.14(c)(1)(iii)(B)]

The applicant should demonstrate anticipated need and market for the forest products planned to be grown on the site. The application must include information such as the frequency with which the proposed land use occurs in the region and studies of the projected need for or marketability of the services or products resulting from the proposed use. For example, if the proposed land use involves pulpwood production, is an existing or proposed pulp mill located within an economically realistic radius? Or, as another example, within the reasonably foreseeable future, will there be sufficient demand for the proposed products? Documented studies by individuals or organizations with expertise in economic forecasting would be particularly persuasive.

**(iii) Assured of investment in necessary public facilities.** [SMCRA §515(c)(3)(B)(iii); 30 CFR 785.14(c)(1)(iii)(C)]

The application must contain letters or resolutions from State or local governments, water and sewer authorities, or other public agencies committing those entities to supplying the public facilities (such as roads, water and sewer lines) needed to accomplish the proposed postmining land use. If no such public facilities are necessary, the application must explain why not.

**(iv) Supported by commitments from public agencies where appropriate.** [SMCRA §515(c)(3)(B)(iv); 30 CFR 785.14(c)(1)(iii)(D)]

The application must provide the detailed descriptions of any necessary public facilities, and must include letters or resolutions from the appropriate public agency committing that agency to installing, maintaining, or providing advice or assisting to the proposed forestry operation. These

descriptions and letters must be supplied only in cases where the commitments of public agencies are necessary to successfully complete the proposed use.

**(v) Practicable with respect to private financial capability for completion of the proposed use.** [SMCRA §515(c)(3)(B)(v); 30 CFR 785.14(c)(1)(iii)(E)]

Reforestation is a time-intensive investment that may not pay off for many years. The regulatory authority should examine permit applications to determine if the applicant provides substantial and credible information that suggests that forestry is a practical investment for this area. Management plans submitted with the permit application should provide for management of the forest lands beyond an initial harvest (i.e., sustainable yield). The management plan should provide estimates on how much it will cost to implement each step of the plan. The regulatory authority should require evidence that the landowners possess the ability to complete and manage the proposed forestry operation, and financial capability to fund all steps of the management plan. Additionally, there should be a demonstrated long term and significant economic or public benefit to establishing a postmining land use of forestry. Finally, letters from banks or other lending institutions indicating a willingness to loan money for the type of project proposed would be helpful.

**(vi) Planned pursuant to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the postmining land use.** [SMCRA §515(c)(3)(B)(vi); 30 CFR 785.14(c)(1)(iii)(F)]

At a minimum, the reclamation plan must require creation of the specific landforms and site configuration needed for the proposed postmining land use. All necessary roads or utility corridors should also be provided for in the reclamation plan. The plan must explain how suitable soils will be created and excessive compaction avoided. The schedule must identify how mining and reclamation activities will be structured to accommodate these needs. Limiting compaction and selection of the soil materials is crucial to success of tree growth on reclaimed areas. The regulatory authority must require the applicant to designate the areas of tree planting in the permit and specify measures to limit compaction in those areas. The reclamation plans must limit the amounts and type of equipment in the tree planting areas during final reclamation to reduce the amount of soil compaction that occurs. Reclamation must be conducted in a manner that includes handling the material as little as possible and limiting grading to only that which is necessary to achieve the postmining land use. A professional forester or soil scientist should be consulted to determine the proper soil horizons and soil depth to segregate during mining and replace after mining to insure sufficient growth for the targeted forest products.

In addition, the application should designate the species of trees to be planted, and the measures taken to insure erosion will be controlled so that will not interfere with tree growth. Reclamation and planting plans should include the establishment of fire breaks and access routes to allow timber stand management practices. Information regarding the type of equipment to be used during harvesting should be submitted with the application.

**(vii) Designed by a registered engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use.** [SMCRA §515(c)(3)(B)(vii); 30 CFR 785.14(c)(1)(iii)(G)]

Applications should be prepared by both a registered engineer and a forester to insure that the land configuration is compatible with forestry and that compaction in the proposed tree planting area is kept to a minimum. The types and specifications of equipment contemplated for harvesting should be specified in the permit application. A professional forester should evaluate the equipment in light of the final slope configuration to insure the equipment will be able to operate safely and economically on the site.

**3. The applicant demonstrates compliance with the requirements for acceptable alternative postmining land uses in 30 CFR 816.133(a) through (c).** [30 CFR 785.14(c)(1)(ii)]

Under 30 CFR 816.133(a), a permittee must restore all disturbed areas to a condition capable of supporting either their premining uses or higher or better uses. Since 30 CFR 785.14(c)(1)(ii) incorporates only the *alternative* postmining land use requirements of 30 CFR 816.133(a), restoration to conditions solely capable of supporting the premining uses is not an option for mountaintop removal operations. Instead, the permit application must propose higher or better postmining land uses, which are defined in 30 CFR 701.5 as those uses that have a higher economic value or nonmonetary benefit to the landowner or the community than the premining land uses. As discussed in Part I of this document, this requirement applies in addition to, not in place of, the requirement in 30 CFR 785.14(c)(1)(i) that the postmining land use be an equal or better economic or public use compared to the premining use. This does not mean that a proposed postmining land use cannot belong to the same general category as the premining use (e.g., forestry premining use/forestry postmining use). It does mean, however, that the postmining use must represent an added benefit from either a public or economic standpoint. Therefore, rather than being merely forestry/forestry, with an added benefit from either a public or economic standpoint, it would be forestry premining use/commercial forestry postmining use. The regulatory authority would have to establish these added benefit categories (e.g., commercial forestry) as part of its approved program (48 FR 39893; September 1, 1983).

Paragraph (b) of 30 CFR 816.133 pertains to determination of premining uses. Since it contains no requirements unique to alternative postmining land uses, we are not discussing it here.

Paragraph (c) of 30 CFR 816.133 provides that alternative postmining land uses must meet certain criteria. Specifically, the permit application must demonstrate that:

- (1) There is a reasonable likelihood for achievement of the proposed use.
- (2) The proposed use does not present any actual or probable hazard to the public health and safety, or threat of water diminution or pollution.

- (3) The proposed use is not impractical or unreasonable.
- (4) The proposed use is consistent with applicable land use policies or plans.
- (5) There will be no unreasonable delay in implementation of the proposed use.
- (6) The proposed use will not cause or contribute to a violation of Federal, State, or local law.

The fourth criterion duplicates the requirements of 30 CFR 785.14(c)(1)(iv), so the application need not contain any additional information to satisfy that requirement. Information submitted in response to 30 CFR 785.14(c)(1)(iii) also may be useful in demonstrating compliance with the remaining criteria of 30 CFR 816.133(c). However, those criteria are not identical with the requirements of 30 CFR 785.14(c)(1)(iii), nor are they subsets of those requirements. Therefore, the application will need to include the additional economic, environmental, and other information necessary to demonstrate compliance with those criteria.

Determinations of reasonableness or practicality are judgement calls on the part of the regulatory authority. Consultation with land use planning and zoning agencies may assist the regulatory authority in making these determinations.

Finally, under 30 CFR 816.133(c), the regulatory authority must consult with the landowner or land management agency with jurisdiction over the lands in the proposed permit area. The decision record must include documentation of this consultation and the consideration given to any comments received.

**4. Federal, State, and local government agencies with an interest in the proposed land use must have an adequate period in which to review and comment on the proposed use. [30 CFR 785.14(c)(1)(v) ]**

These comments, and the required consultations with appropriate land use planning agencies, surface landowners, and State environmental agencies will be essential to the regulatory authority in making the judgements and determinations under these provisions.

**C. Agricultural uses.**

An exception from the AOC requirements for an agricultural postmining land use is authorized for mountaintop removal operations (at SMCRA section 515(c)), but is not authorized for steep slope mining operations (see SMCRA at section 515(e)). For mountaintop removal operations, Congress intended that the agricultural postmining land use would encompass a broader range of agricultural activities than simply commercial agricultural uses. However, the Congress also indicated that this expanded use of the term agriculture is not intended to favor less managed



and low intensity activities such as grazing, pastureland and the like. H.R. Rep. No. 95-218, at 109 (1977).

Among other things, 30 CFR 785.14(c) requires consultation with appropriate land use planning agencies, if any exist; a demonstration that the proposed postmining land use is an equal or better economic or public use of the land, compared with the premining use; a finding that the use is not impractical or unreasonable and that it will not involve an unreasonable delay in implementation; and a demonstration that the proposed use is obtainable according to data regarding need and market.

An approval of an agricultural postmining land use for mountaintop removal operations would require the following.

**1. Consultation with the appropriate land use planning agencies, if any, to determine if the proposed postmining land use constitutes an equal or better economic or public use of the affected land, as compared with the premining use.** [SMCRA §515(c)(3)(A); 30 CFR 785.14(c)(1)(i)]

As with any postmining land use, exceptions to the standards of AOC should only be granted where it is demonstrated that such exceptions result in an equal or better public or economic use for which some significant public benefit will be derived. Through consultations with appropriate land use planning agencies, the regulatory authority should determine if there is a need for an agricultural postmining land use. That identified need should be documented and the beneficial aspects of the agricultural postmining land use should be sufficiently clear. The regulatory authority should insure that the land use agencies are fully aware of the mining operations and reclamation plan and the proposed post mining contours and land use. The permit application should discuss the potential economic and environmental impacts of the proposed operation to assist the regulatory authority in making this determination even in the absence of any appropriate State or local planning agencies.

In addition, the regulatory authority could determine whether appropriate agencies concur with the proposed agricultural postmining land use, and will provide any necessary reviews, advice, and support for development and implementation of the postmining land use. For example, support may be needed from agencies including but not limited to a Bureau of Agriculture and a Bureau of Conservation for advice and concurrence related landscape designs, and for erosion and sedimentation control measures.

**2. (a) The applicant must present specific plans for the proposed postmining land use.** [SMCRA §515(c)(3)(B); 30 CFR 785.14(c)(1)(iii)]

The regulatory authority should insure that the applicant provides a credible plan for the proposed agricultural activities. The agricultural plan must discuss the proposed mining and reclamation activities and their impact on crop establishment and growth, and should also discuss

the planting, maintenance and harvesting of the agricultural products.

The regulatory authority should also provide a copy of the agricultural plan to the appropriate state agency qualified to assess the validity of the plan, i.e., Bureau of Agriculture. The reviewing agency should be fully cognizant of the final site configuration. This agency should be charged with reviewing the technical aspects of the plan to insure that: 1) the postmining soils are suitable for the proposed agricultural plants, 2) the plan provides all steps necessary for the landowner to protect the soil, and 3) the plan will allow efficient harvest of the agricultural products.

**(b) The applicant also provides appropriate assurances that the proposed postmining land use will be:**

**(i) Compatible with adjacent land uses.** [SMCRA §515(c)(3)(B)(i); 30 CFR 785.14(c)(1)(iii)(A)]

In addition to requiring compliance with all local ordinances and zoning requirements, the regulatory authority should insure that there are no adjacent land uses that will make growing, spraying, or harvesting of agricultural products impractical. Transcripts of all pertinent public meetings and hearings pertaining to the permit application should be required. The responsibility for making the compatibility determination rests with the regulatory authority, not any other governmental entity. The permit application should discuss the potential impacts of the proposed mining operations on adjacent land uses, even in the absence of any appropriate State or local planning or zoning ordinances.

**(ii) Obtainable according to data regarding expected need and market.** [SMCRA §515(c)(3)(B)(ii); 30 CFR 785.14(c)(1)(iii)(B)]

Here, the regulatory authority should require specific demographic data and a market analysis which demonstrate a need for and the feasibility of an agricultural postmining land use. The data and analysis should be sufficiently detailed to allow the regulatory authority to assess the validity of the proposal. That is, the data and analysis should clearly document such things as the expected demand and markets for the agricultural products proposed to be produced. For example, if the proposed land use involves the commercial production of crops, is a consumer population, or is a processing facility located within an economically realistic radius? Or, as another example, within the reasonably foreseeable future, will there be sufficient demand for the proposed products? Documented studies by individuals or organizations with expertise in economic forecasting would be particularly persuasive.

**(iii) Assured of investment in necessary public facilities.** [SMCRA §515(c)(3)(B)(iii); 30 CFR 785.14(c)(1)(iii)(C)]

This may not be applicable to an agricultural use. The application must contain letters or

resolutions from State or local governments, water and sewer authorities, or other public agencies committing those entities to supplying any necessary roads, water and sewer lines, or other public facilities needed to accomplish the proposed postmining land use. If no public facilities are necessary, the application must explain why not.

**(iv) Supported by commitments from public agencies where appropriate.** [SMCRA §515(c)(3)(B)(iv); 30 CFR 785.14(c)(1)(iii)(D)]

The application must provide the detailed descriptions of any necessary public facilities, and must include letters or resolutions from the appropriate public agency committing that agency to installing, maintaining, or providing advice or assistance to the proposed agricultural operation. The permittee should document any commitments of support that may be needed for police protection, future construction and maintenance of roads, structures and utilities, fire protection, schools, etc.

**(v) Practicable with respect to private financial capability for completion of the proposed use.** [SMCRA §515(c)(3)(B)(v); 30 CFR 785.14(c)(1)(iii)(E)]

Here, the regulatory authority should require documentation that indicates a reasonable expectation that private financing of the development and operation of an agricultural postmining land use would be available. The permit application should provide substantial and credible information that suggests that agriculture is a practical investment for this area. Such documentation should provide sufficient details of the expected developmental and operational costs as to allow the regulatory authority to assess whether the proposed agricultural use is obtainable, practicable, and reasonable. The regulatory authority should require evidence that the landowners possess the financial capability to fund all steps of the operational plan. Additionally, there should be a demonstrated long term and significant economic or public benefit to establishing a postmining land use of agriculture. Finally, letters from banks or other lending institutions indicating a willingness to loan money for the type of project proposed would be helpful.

**(vi) Planned pursuant to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the postmining land use.** [SMCRA §515(c)(3)(B)(vi); 30 CFR 785.14(c)(1)(iii)(F)]

Here, the regulatory authority should require the details of how the specific plans for the postmining land use will be incorporated into the mining and reclamation operations. At a minimum, the reclamation plan must require creation of the specific landforms and site configuration needed for the proposed postmining land use, along with any necessary roads or utility corridors, even though the permittee is not required to actually implement the postmining land use. The plan must explain how suitable soils will be created and excessive compaction avoided. The schedule must identify how mining and reclamation activities will be structured to accommodate these needs. The specific plans and schedule submitted must provide sufficient

detail to allow the regulatory authority to assess whether the proposed agricultural postmining land use is obtainable, practicable, and reasonable.

**(vii) Designed by a registered engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use.** [SMCRA §515(c)(3)(B)(vii); 30 CFR 785.14(c)(1)(iii)(G)]

Applications should be prepared by a registered engineer to insure that the land configuration is compatible with an agricultural postmining land use, and that compaction in the proposed agricultural areas is appropriate to the agricultural products to be grown.

**3. The applicant demonstrates compliance with the requirements for acceptable alternative postmining land uses in 30 CFR 816.133(a) through (c).** [30 CFR 785.14(c)(1)(ii)]

Under 30 CFR 816.133(a), a permittee must restore all disturbed areas to a condition capable of supporting either their premining uses or higher or better uses. Since 30 CFR 785.14(c)(1)(ii) incorporates only the *alternative* postmining land use requirements of 30 CFR 816.133(a), restoration to conditions solely capable of supporting the premining uses is not an option for mountaintop removal operations. Instead, the permit application must propose higher or better postmining land uses, which are defined in 30 CFR 701.5 as those uses that have a higher economic value or nonmonetary benefit to the landowner or the community than the premining land uses. As discussed in Part II of this document, this requirement applies in addition to, not in place of, the requirement in 30 CFR 785.14(c)(1)(i) that the postmining land use be an equal or better economic or public use compared to the premining use. This does not mean that a proposed postmining land use cannot belong to the same general category as the premining use (e.g., forestry premining use/forestry postmining use). It does mean, however, that the postmining use must represent an added benefit from either a public or economic standpoint. Therefore, rather than being merely forestry/forestry, with an added benefit from either a public or economic standpoint it would be forestry premining use/commercial forestry postmining use. The regulatory authority would have to establish these added benefit categories (e.g., commercial forestry) as part of its approved program (48 FR 39893; September 1, 1983).

Paragraph (b) of 30 CFR 816.133 pertains to determination of premining uses. Since it contains no requirements unique to alternative postmining land uses, we are not discussing it here.

Paragraph (c) of 30 CFR 816.133 provides that alternative postmining land uses must meet certain criteria. Specifically, the permit application must demonstrate that:

- (1) There is a reasonable likelihood for achievement of the proposed use.
- (2) The proposed use does not present any actual or probable hazard to the public health and

safety, or threat of water diminution or pollution.

- (3) The proposed use is not impractical or unreasonable.
- (4) The proposed use is consistent with applicable land use policies or plans.
- (5) There will be no unreasonable delay in implementation of the proposed use.
- (6) The proposed use will not cause or contribute to a violation of Federal, State, or local law.

The fourth criterion duplicates the requirements of 30 CFR 785.14(c)(1)(iv), so the application need not contain any additional information to satisfy that requirement. Information submitted in response to 30 CFR 785.14(c)(1)(iii) also may be useful in demonstrating compliance with the remaining criteria of 30 CFR 816.133(c). However, those criteria are not identical with the requirements of 30 CFR 785.14(c)(1)(iii), nor are they subsets of those requirements. Therefore, the application will need to include the additional economic, environmental, and other information necessary to demonstrate compliance with those criteria.

Determinations of reasonableness or practicality are judgement calls on the part of the regulatory authority. Consultation with land use planning and zoning agencies may assist the regulatory authority in making these determinations.

Finally, under 30 CFR 816.133(c), the regulatory authority must consult with the landowner or land management agency with jurisdiction over the lands in the proposed permit area. The decision record must include documentation of this consultation and the consideration given to any comments received.

**4. Federal, State, and local government agencies with an interest in the proposed land use must have an adequate period in which to review and comment on the proposed use. [30 CFR 785.14(c)(1)(v)]**

These comments, and the required consultations with appropriate land use planning agencies, surface landowners, and State environmental agencies will be essential to the regulatory authority in making the judgments and determinations under these provisions.

#### **IV. AOC VARIANCE REQUIREMENTS FOR STEEP SLOPE MINING OPERATIONS**

##### **A. Acceptable postmining land uses.**

The land use category of fish and wildlife habitat is defined at 30 CFR 701.5 under the

definition of Land use as land dedicated wholly or partially to the management of species of fish or wildlife. Neither SMCRA at section 515(e)(2) nor the implementing Federal regulations at 30 CFR 785.16(a)(1) authorize fish and wildlife habitat, as a qualifying postmining land use for steep slope mining operations that seek a variance from the AOC requirements. Therefore, a permit application which includes an AOC variance cannot be approved for steep slope mining operations when a postmining land use of fish and wildlife is proposed. However, when fish and wildlife habitat features such as ponds and wetlands are to be created as part of a public recreational facility, they may play a supporting role in obtaining an exception from the AOC restoration requirements.

The term public use, which appears in section 515(e)(2) of SMCRA as part of the requirements for obtaining an AOC variance for steep slope mining operations, has a meaning identical to that of the term public facility use, which appears in section 515(c)(3) of SMCRA as part of the requirements for mountaintop removal operations. They appear in similar contexts and neither the statute nor its legislative history provides any indication that Congress intended that these terms have different meanings. Based on characterizations of the public use provision in the Congressional floor debate concerning the amendment that became the AOC variance for steep slope mining operations, we must conclude that the term public use means the same as public facility use.

Unlike section 515(c)(3), which lists agricultural uses as acceptable postmining land uses for mountaintop removal operations, section 515(e)(2) does not include agriculture as an approvable postmining land use for AOC variances for steep slope mining operations. Therefore, because we have recognized forestry as an agricultural land use since 1983 (48 FR 39893, September 1, 1983), forestry is not an allowable postmining land use for AOC variances for steep slope mining operations.

## **B. Permitting Requirements.**

The following discussion pertains to selected permitting requirements for AOC variances for steep slope mining operations. It does not address all applicable requirements.

### **1. Consultation with the appropriate land use planning agencies to determine if the potential use of the affected land is deemed to constitute an equal or better economic or public use. [SMCRA §515(e)(3)(A); 30 CFR 816/817.133(d)]**

The guidance provided in Part III.A.1. of this document applies here. The regulatory authority should strive to identify cases where the public would be better served if the land were reclaimed to the proposed postmining land use rather than being returned to AOC. In addition, the applicant must demonstrate that the site will be suitable for the proposed postmining land use.

### **2. The postmining land use must be designed and certified by a qualified registered**

**professional engineer in conformance with professional standards established to ensure the stability, drainage, and configuration necessary for the intended use of the site.** [SMCRA §515(e)(3)(B); 30 CFR 816/817.133(d)(5)]

The discussion in Part III.A.2.(vii) applies here, but for all land uses, not just public uses.

**3. The watershed of the permit and adjacent areas is deemed to be improved.**  
[SMCRA §515(e)(3)(C); 30 CFR 785.16(a)(3); 30 CFR 816/817.133(d)(6)]

Section 515(e)(3)(C) of SMCRA authorizes the regulatory authority to grant a permit that provides a variance from AOC restoration requirements for steep slope mining operations if, among other things, after approval of the appropriate state environmental agencies, the watershed of the affected land is deemed to be improved. Our regulations at 30 CFR 785.16(a)(3) and 30 CFR 816/817.133(d)(6) flesh out this provision by requiring that the permit application demonstrate, and the regulatory authority find, that the proposed mining operations will improve the watershed of lands within the proposed permit and adjacent areas. Under 30 CFR 785.16(a)(3), the basis for comparison may be either the premining condition of the watershed or the projected condition of the watershed if the mining operations restored the site to its AOC.

This regulation [30 CFR 785.16(a)(3)] also specifies that the watershed will be deemed improved only if the following three conditions are met:

The proposed operation will reduce either (1) the amount of total suspended solids or other pollutants discharged to ground or surface water from the permit area so as to improve public or private uses or the ecology of the water, or (2) flood hazards within the watershed by lowering the peak flow discharge from precipitation events or thaws.

During each season, the total flow from the proposed permit area will not vary in a way that adversely affects surface water ecology or any existing or planned use of surface or ground water.

The appropriate State environmental agency or agencies approve the watershed improvement aspects of the proposed operation and reclamation plan. Our regulations at 30 CFR 816/817.133(d)(6) clarify that this condition applies only when the approval of those agencies is otherwise required.

The application must include the hydrologic data and analyses necessary to demonstrate that these three conditions exist.

**4. The regulatory authority must assure that the surface landowner of the permit area has knowingly requested, in writing, that the AOC variance be granted.** [SMCRA §515(e)(2); 30 CFR 785.16(a)(4); 30 CFR 816/817.133(d)(9)]

5. **In granting a variance, the regulatory authority shall require that only that amount of spoil will be placed off the mine bench as is necessary to achieve the planned postmining land use, insure stability of the spoil retained on the bench, and meet all other SMCRA requirements.** [SMCRA §515(e)(4); 30 CFR 816/817.133(d)(8)]
6. **The alternative postmining land use requirements of 30 CFR 816/817.133(c) are met.** [30 CFR 785.16(a)(2); 30 CFR 816/817.133(d)(2)]

Our regulations at 30 CFR 816/817.133(c) effectively define alternative postmining land uses as higher or better uses. As defined in 30 CFR 701.5, higher or better postmining land uses are those uses that have a higher economic value or nonmonetary benefit to the landowner or the community than the premining land uses. Therefore, the permit application must demonstrate that the proposed postmining land use is a higher or better use than the premining use. This requirement applies in addition to, not in place of, the requirement in 30 CFR 816/817.133(d)(4) that the postmining land use be an equal or better economic or public use compared to the premining use.

Paragraph (c) of 30 CFR 816.133 provides that alternative postmining land uses must meet certain criteria. Under this paragraph, the permit application must include the economic, environmental, and other information necessary to demonstrate that:

- (1) There is a reasonable likelihood for achievement of the proposed use.
- (2) The proposed use does not present any actual or probable hazard to the public health and safety, or threat of water diminution or pollution.
- (3) The proposed use is not impractical or unreasonable.
- (4) The proposed use is consistent with applicable land use policies or plans.
- (5) There will be no unreasonable delay in implementation of the proposed use.
- (6) The proposed use will not cause or contribute to a violation of Federal, State, or local law.

Determinations of reasonableness or practicality are judgement calls on the part of the regulatory authority. Consultation with land use planning agencies may assist the regulatory authority in making these determinations.

Finally, under 30 CFR 816.133(c), the regulatory authority must consult with the landowner or land management agency with jurisdiction over the lands in the proposed permit area. This requirement is effectively subsumed by the requirement in 30 CFR 785.16(a)(4) and



816/817.133(d)(9) that the surface landowner submit a written request for a variance.

7. **Federal, State, and local government agencies with an interest in the proposed land use must have an adequate period in which to review and comment on the proposed use.** [30 CFR 816/817.133(d)(10)]

The regulatory authority must consider these comments and the result of the required consultations with appropriate land use planning agencies, surface landowners, and State environmental agencies when making the judgements and determinations required under these rules.

# Appendix

## Statutory and Regulatory Citations

<b>FEDERAL PROVISIONS</b>	<b>Approximate Original Contour (AOC) Restoration</b>	<b>Mountaintop Removal Operations</b>	<b>Steep Slope AOC Variance</b>
<b>SMCRA citations</b>	515(b)(3)	515(c)	515(e)
<b>30 CFR citations</b>	816.102-816.107 817.102-817.107	785.14, Part 824	785.16, 816/817.133(d)