# U. S. DEPARTMENT OF THE INTERIOR OFFICE OF SURFACE MINING ENVIRONMENTAL ASSESSMENT

for

#### RULEMAKING ON COAL REMINING INCENTIVES

#### A. Introduction

This environmental assessment discusses the anticipated environmental impacts of alternatives for OSM's proposed action, which would authorize incentives for remining abandoned mine land (AML) refuse sites. The options discussed in this Environmental Assessment reflect various financial incentives we are considering in the proposed rule to encourage operators to conduct remining operations. The incentives we are proposing might expedite reclamation of some sites, and remining can lead to removal of toxic materials from sites, and thus facilitate reclamation of the sites. The incentives may increase the amount of land reclaimed. Therefore, our discussion of the options evaluates the relative merit of one type of financial incentive over another in encouraging operators to remine sites, but because the environmental effects of each option do not change, except possibly from the quantity of land reclaimed, we have provided only a general discussion on the environmental effects of remining.

### B. Description of the Proposed Action

We, the Office of Surface Mining Reclamation and Enforcement (OSM), are proposing to revise our existing regulations in light of changes to Title IV of the Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. § 1201 *et seq.* (SMCRA). The changes would reflect the amendments to SMCRA in the Tax Relief and Health Care Act of 2006, Public Law 109-432 (December 12, 2006) (the SMCRA Amendments of 2006). Specifically, the revisions to our regulations would implement new SMCRA section 415, which authorizes, in part, incentives to promote the remining of eligible abandoned coal mine waste lands (referred to hereafter as abandoned coal refuse sites). A remining operation mines coal from land that has been disturbed by previous coal mining operations.

In general, we are proposing that operators would not be required to pay fees for coal produced by an abandoned coal refuse mining operation that removes all abandoned coal refuse if the fees have been waived pursuant to 30 CFR 785.26 and 870.13(d) that provide for a waiver of reclamation fees as an incentive for remining. The waiver of reclamation fees applies only to production of coal by removal of abandoned coal mine waste for reprocessing or direct use off site.

<u>Background</u>: Coal mine sites that were mined before the passage of SMCRA in 1977 may or may not have been adequately reclaimed. These sites often include environmental and safety problems resulting from inadequate reclamation such as landslides, instability, erosion and sedimentation of streams, inadequate vegetation, and water quality problems.

Unreclaimed sites and sites that were not reclaimed to the standards later set forth in SMCRA are popularly called "abandoned mine sites" and are eligible for reclamation under the AML program pursuant to SMCRA title IV and the implementing regulations at 30 CFR subchapter R - Abandoned Mine Land Reclamation. However, in some States there are many abandoned mine sites to be reclaimed, and reclamation of some sites may have to await reclamation of higher priority sites. This proposed action addresses a possible means to encourage reclamation of some abandoned coal refuse sites by remining operations. We believe this may be feasible because, in many cases, previously mined lands may also include additional coal reserves that can be economically mined using present technology. Often operators could remine these areas and reclaim them, eliminating existing environmental and safety problems. Thus, remining may avoid the necessity to wait for funding under the AML program in order to reclaim these sites.

## Remining operations fall into two major categories:

- 1. Operations that mine coal in its original geologic location. The mining of prior underground workings after the overburden has been stripped away and the taking of additional mining cuts from an existing highwall are both examples of remining operations that mine coal in its original geologic location. Remining operations that mine coal in its original geologic location have the potential to remove or otherwise disturb rock strata that serve as aquifers.
- 2. Operations that mine coal not in its original geologic location. Coal refuse removal and coal refuse on-site reprocessing operations are examples of remining operations that mine coal not in its original geologic location. Coal refuse was considered waste material at the time that the initial mining occurred. These operations are also known collectively as abandoned coal refuse remining operations. On coal refuse disposal sites, the coal refuse is a mixture of coal and waste materials. Remining operations can either remove the coal refuse for burning in co-generating plants to produce electricity or segregate the coal from the waste in a procedure called reprocessing. Reprocessing operations can either take place on the site where the coal refuse is located or the coal refuse can be removed from the site and reprocessed in another location. If the coal refuse is reprocessed on site, the waste material remaining after the coal is segregated must be disposed of on the site. When coal refuse is reprocessed off site, the material remaining after the coal is separated is disposed of in a regulated facility.

Because abandoned coal refuse remining operations do not mine coal in its original geologic location, they do not have the potential to remove or otherwise disturb rock strata that serve as aquifers. Likewise, because abandoned coal refuse remining operations do not remove overburden in order to uncover the mineable refuse, they

neither create highwalls and overburden spoil nor remove the host rock of the ground-water aquifers. Because the refuse at abandoned coal refuse sites was most often placed without regard to stability, erosion and surface - and ground-water impacts have commonly resulted. Therefore, almost all abandoned coal refuse remining operations have excellent potential for improving the adverse conditions that, in most cases, already exist at these abandoned mine sites. This improvement is typically accomplished by stabilizing surface conditions, and reducing the potential for refuse fires, and reducing the volume of refuse and the associated potential for acid mine drainage.

Summary of SMCRA Amendments of 2006: On December 20, 2006, Congress enacted the Tax Relief and Health Care Act of 2006. This Act amended SMCRA by, among other things, adding section 415, titled "Remining Incentives." Section 415 gave the Secretary of the Interior the option to promulgate rules, within certain guidelines, to provide an incentive to encourage remining of certain previously mined sites, including both abandoned coal mine waste sites and sites that meet the priorities specified in paragraph (1) or (2) of section 403(a) (30 U.S.C. § 1233) of SMCRA.

In section 415, Congress specified two incentives, among others, that the Secretary could consider adopting by regulation to encourage remining. The first incentive specifically authorized by section 415 for the Secretary's consideration is a rebate or waiver of reclamation fees operators must pay for mining coal. Reclamation fees are required under section 402 of SMCRA (30 U.S.C. § 1232). Section 402 requires that all operators of coal mining operations subject to the Act pay to the Secretary of the Interior a fee based on each ton of coal produced. This fee, known as a reclamation fee, is to be deposited into the Abandoned Mine Reclamation Fund (Fund). Generally, moneys from the Fund are allocated to States and Indian tribes with approved reclamation programs, to be used for reclamation of land and water resources adversely affected by past coal mining.

Section 415 establishes restrictions on the use of rebates or waivers. Under section 415, only two types of remining operations can be eligible for a rebate or waiver of reclamation fees: operations that remove or reprocess abandoned coal mine waste (called "abandoned coal refuse" in this EA); and operations that conduct remining activities that meet the priorities specified in paragraph (1) or (2) of SMCRA section 403(a) (typically called priority 1 or priority 2 AML sites). Section 403(a) was also amended by the SMCRA Amendments of 2006. As amended, paragraph 403(a)(1) is subdivided into subparagraphs (1)(A) and (1)(B). Similarly, amended paragraph 403(a)(2) is subdivided into subparagraphs (2)(A) and (2)(B). The priority referred to in subparagraph (1)(A) is protection of public health, safety, and property from extreme danger of adverse effects of coal mining practices; and the priority referred to in subparagraph (1) (B) is restoration of land and water resources and the environment that have been degraded by the adverse effects of coal mining practices; and are adjacent to a site that has been or will be remediated under subparagraph (1)(A). The priority referred to in subparagraph (2)(A) is protection of public health and safety from adverse effects of coal mining practices; and the priority referred to in subparagraph (2)(B) is restoration of land and water resources and the environment that have been degraded by the adverse effects of coal mining

practices, and are adjacent to a site that has been or will be remediated under subparagraph (2)(A). OSM refers to the priorities in subparagraphs (1)(A) and (B) collectively as "priority 1," and to the priorities in subparagraphs (2)(A) and (B) collectively as "priority 2."

In addition to limiting the use of a rebate or waiver of reclamation fees as an incentive for remining abandoned coal refuse sites and priority 1 and priority 2 sites, Congress also provided that the amount of a rebate or waiver of the reclamation fees must not exceed the estimated cost of reclaiming the eligible land.

The second incentive specifically authorized in section 415 for the Secretary's consideration provides for "the use of amounts in the Fund to provide financial assurance for remining operations in lieu of all or a portion of the performance bonds required under section 509 [30 U.S.C. § 1259]." Section 509 provides that before a surface coal mining and reclamation permit is issued, the permit applicant must file with the regulatory authority a bond for performance conditioned on faithful performance of all the requirements of the Act and the permit. The amount of the bond must be sufficient to assure the completion of the reclamation plan if the work had to be performed by the regulatory authority in the event of bond forfeiture. The instruments that can be accepted as a performance bond are detailed in our regulations at 30 CFR part 800. Remining operations require a permit under title V of SMCRA which, in turn, requires posting of a bond. An operator may have difficulty obtaining a bond to remine previously mined sites because of the environmental and safety problems often associated with these sites. Therefore, as an incentive to encourage operators to remine these sites, Congress authorized the Secretary to allow use of monies from the Fund in lieu of all or a portion of the performance bond a permit applicant must post to secure a mining permit.

The use of monies in the Fund in lieu of all or a portion of the reclamation bond as an incentive for remining operations is not restricted to any particular type of remining operation. Therefore, the Secretary could adopt regulations allowing this incentive for any type of remining operation.

Congress specifically authorized the Secretary to consider adopting the two types of incentives discussed above (rebate or waiver of reclamation fees and use of the Fund in lieu of performance bond), but did not limit the incentives the Secretary could consider to those two specific types of incentives. Section 415 provides that the Secretary may adopt any such incentives by promulgating rules after public comment. However, any rules authorizing incentives under section 415 must meet certain conditions imposed by that section. The rules must describe conditions under which amounts in the Fund may be used to provide incentives to promote remining of eligible land under section 404 in a manner that leverages the use of monies from the Fund to achieve more reclamation with respect to the eligible land than would be achieved without the incentives. Section 415 also requires that any regulations promulgated by the Secretary must specify that the incentives will apply only if the Secretary determines, with the concurrence of the State regulatory authority referred to in title V of SMCRA that, without the incentives, the eligible land would not be likely to be remined and reclaimed.

## C. Need for Proposed Action

This proposed action is intended to address the need to encourage reclamation of abandoned coal refuse sites by remining operations. In many cases, previously mined lands still contain coal reserves that can be economically mined using present technology. As discussed above, remining and reclaiming these areas could improve or eliminate existing environmental and safety problems, such as acid drainage and pollution of adjacent streams resulting from large amounts of pyritic materials, and uncontrolled erosion resulting in stream siltation and downstream flooding. Improving these adverse conditions is typically accomplished by stabilizing surface conditions, reducing the potential for refuse fires, and reducing the volume of refuse and the associated potential for acid mine drainage. Specifically, this action is intended to address the following needs.

Because of the variety and severity of problems associated with previously mined sites, there is a need to expedite reclamation of the sites where possible. The more quickly these sites are reclaimed, the more quickly associated environmental and safety problems can be corrected. In some States there are many abandoned mine sites to be reclaimed, and reclamation of some abandoned coal refuse sites may have to await reclamation of higher priority sites. Remining may avoid the necessity for States to wait for funding under the AML program in order to reclaim some sites. This action is intended to provide operators with an incentive to undertake remining and reclamation of abandoned coal refuse sites whether or not they are at the top of States' reclamation priority lists. Therefore, this action is not intended primarily to expedite remining of priority 1 or 2 sites, *per se*, since priority 1 and 2 sites are addressed primarily under the AML program. This action would apply only to abandoned coal refuse sites; however some abandoned coal refuse sites may also qualify as priority 1 or 2 sites.

The cumulative cost of reclaiming all AML sites is relatively significant and there is a need to reduce the program costs of reclamation if possible. States will be more likely to offer incentives that reduce AML program costs so that they can obtain more reclamation for their allotted funds. Similarly, incentives are more likely to be offered by States if they can readily implement them without excessive recordkeeping or paperwork requirements and can ensure that the incentives will not interfere with their ability to utilize AML funds for reclamation of mine sites that have the most severe environmental and safety problems.

Because this action is intended to encourage operators to voluntarily remine and reclaim, there is a need to offer an incentive that effectively increases the likelihood that operators will remine. Operators will be more likely to take advantage of incentives that are not complicated to obtain, do not place excessive or unnecessarily burdensome requirements on them, and offer a benefit that outweighs associated costs.

This action must also take into account and be consistent with the purposes of SMCRA as set forth in section 102. 30 U.S.C. § 1202. Relevant purposes set out in section 102 include:

(a) ... protect society and the environment from the adverse effects of surface coal mining operations;

. . . .

- (d) assure that surface coal mining operations are so conducted as to protect the environment:
- (e) assure that adequate procedures are undertaken to reclaim surface areas as contemporaneously as possible with the surface coal mining operations;
- (f) assure that the coal supply essential to the Nation's energy requirements, and to its economic and social well-being is provided and strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy;

. . . .

(h) promote the reclamation of mined areas left without adequate reclamation prior to the enactment of this Act and which continue, in their unreclaimed condition, to substantially degrade the quality of the environment, prevent or damage the beneficial use of land or water resources, or endanger the health or safety of the public.

30 U.S.C. § 1202(a), (d), (e), (f), and (h).

#### D. Action Alternatives

OSM has considered six action alternatives:

**Alternative 1: Take no action.** Under this alternative, OSM would not offer any incentives to encourage coal remining operations. If the comments received during the proposed rule's public comment demonstrate insufficient interest in, or effectiveness of, remining as authorized in SMCRA section 415 we may choose not to adopt a rule authorizing incentives. The National Environmental Policy Act (NEPA) requires consideration of a "no action" alternative.

Alternative 2: Revise the applicable regulations to offer incentives in the form of waivers of reclamation fees to promote the remining of abandoned coal mine waste piles for reprocessing or direct use off site. (Preferred Alternative). Under this alternative, OSM would add certain new provisions, at 30 CFR 732.18, 785.26, 870.13(d), and 872.23. Operators would not be required to pay fees for coal produced by an abandoned coal refuse mining operation as defined in section 701.5 that removes all abandoned coal refuse if the fees have been waived pursuant to 30 CFR 785.26 and 870.13(d) that provide for a waiver of reclamation fees as an incentive for remining. The waiver of reclamation fees would apply only to production of coal by

removal of abandoned coal mine waste for reprocessing or direct use off site. That is, it applies only if all refuse is removed for processing off site.

Alternative 3: Revise the applicable regulations to offer incentives in the form of waivers of reclamation fees to promote the remining of abandoned coal mine waste piles by on-site reprocessing. Under this alternative, OSM would add certain new provisions, at 30 CFR 732.18, 785.26, 870.13(d), and 872.23. Operators would not be required to pay fees for coal produced by an abandoned coal refuse mining operation as defined in section 701.5 that reprocesses all abandoned coal refuse if the fees have been waived pursuant to 30 CFR 785.26 and 870.13(d) that provide for a waiver of reclamation fees as an incentive for remining. The waiver of reclamation fees would apply only to production of coal by on-site reprocessing of abandoned coal mine waste.

Alternative 4: Revise the applicable regulations to allow the use of amounts in the Abandoned Mine Reclamation Fund (Fund) established pursuant to section 401 to provide financial assurance for remining operations in lieu of all or a portion of the performance bonds required under section 509. Under this alternative, OSM would revise existing bonding regulations at 30 CFR Part 800 to create a framework for States to use to revise their bonding programs to use monies from the Fund to subsidize the performance bonds required to conduct remining operations.

Alternative 5: Revise the applicable regulations to offer incentives in the form of rebates of reclamation fees to promote the remining of abandoned coal mine waste piles. Under this alternative, OSM would initiate rulemaking to amend the regulations at 30 CFR Parts 870 and 872 to provide for a rebate of reclamation fees paid for each ton of coal removed during remining operations. Fees for abandoned coal refuse remining operations as defined in section 701.5 that remove abandoned coal refuse will be rebated to operators if the regulatory authority determines that, without the rebate, the eligible land would not likely be remined and reclaimed.

Rationale for Preferred Alternative: We chose to propose a waiver rather than a rebate of reclamation fees because we believe that it would be simpler to administer an incentives program that offers an upfront waiver. A rebate would require that an operator first pay reclamation fees and then apply for a rebate, thus involving additional record keeping by both OSM and the States and would delay payments to operators.

Additionally, we are proposing that the waiver of fees apply only to operations where all coal refuse is removed from the site for reprocessing or direct use off site. The waivers would not be granted where only a portion of the refuse material is removed from the site. We believe that removal of all refuse material would be the most beneficial way to ensure complete reclamation of the site with the fewest adverse impacts

OSM considers removal operations to have a lower potential for adverse impacts than onsite reprocessing operations have. Removal operations, which involve sorting, sizing, and removal of refuse material from a site, generally do not disturb lands outside the disposal site and generally do not result in water discharges. In contrast, on-site reprocessing operations involve "cleaning" the refuse in order to separate out the coal using specific gravity techniques and do produce a significant discharge. Also, for onsite reprocessing operations, on-site disposal of the resultant waste material is common. Most significantly, refuse removal operations generate little, if any, residual waste and no wet refuse waste, as compared to that generated by on-site reprocessing operations. Further, refuse removal operations do not require on-site reprocessing or preparation plants with their associated process water circuits, discharges, and ponds. Additionally, most refuse removal operations will be of shorter duration than on-site refuse reprocessing operations.

We believe that our proposal could be fairly and easily implemented by States who elect to do so, and would result in environmental improvements because the incentive would encourage operators to reclaim abandoned coal mine waste piles.

We chose not to propose a rule to use monies from the Fund to provide financial assurances in lieu of all or part of required performance bonds. We anticipate that a nationwide rule that adds to, or modifies existing bonding regulations would not be easy or simple for most States to implement, in light of the diversity of bonding systems employed in the States. For example, in our outreach for this rulemaking, one State indicated that it employed one agency to administer title IV projects and a separate agency to administer title V projects. Further, that State was concerned that its laws may not allow title IV funds to guarantee reclamation of title V projects or may not allow transfer of funds from its title IV agency to its title V agency. In addition, we were concerned that use of monies from the Fund for bonding purposes could be significantly more costly than a waiver of AML fees would be, and thus could make a greater amount of monies unavailable to complete existing Fund obligations.

#### E. Affected Environment

Detailed descriptions of the physical environment in the various coal regions of the nation and a more comprehensive description of the regulatory environment are found in OSM-EIS-1 (January 1979); OSM-EIS-1-SUPP (January 1983); *Environmental Assessment for Abandoned Coal Refuse Sites* (RIN 1029-AB70); *Excess Spoil Minimization - Stream Buffer Zones*, OSM-EIS-34. U.S. Department of Interior, Office of Surface Mining, 2007; *Mountaintop Mining/Valley Fills in Appalachia Draft Programmatic Environmental Impact Statement*. U.S. Environmental Protection Agency, EPA 9-03-R-00013, 2003. We are tiering off (i.e. relying on the extensive background information and analyses of previous documents) these documents in accordance with NEPA.

# F. Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal actions to address environmental justice in minority populations and low-income populations." This Executive Order requires, among other things, that each Federal agency must analyze the environmental effects, including human health, economic, and social effects, of Federal actions, including effects on minority and low-income communities, when such analysis is required by NEPA. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities.

The preferred alternative would result in enhancing the removal and reclamation of already disturbed abandoned coal refuse sites. Refuse sites, particularly refuse sites of less than 25 acres in area, are located widely throughout several States. As reported in the 1999 study by the National Mine Land Reclamation Center at West Virginia University, almost all abandoned refuse piles, regardless of their size, were located near a mine site, coal processing plant or transportation facility. While some sites were located near populated areas at the time the refuse site was established, many more were located in areas of subsequent community development. The characteristics of minority and lowincome populations presently impacted by abandoned coal refuse piles, are specific to each site and could not reasonably be determined. However, OSM has made the following assumptions. It is likely that the abandoned refuse sites are disproportionately located near communities with above-average poverty rates. Regardless of the characteristics of the nearby population, the complete or partial removal of abandoned refuse and regrading and revegetation of the site would have the potential to provide long-term environmental enhancements as well as improved land use. For the reasons outlined above, it is likely that the preferred alternative would not have negative longterm impacts. It is also likely that removal and reclamation of existing coal refuse sites would result in an improvement of both the physical and socioeconomic status of the site and proximate area. The site potentially could be developed to implement a higher and better residential, commercial, and/or industrial land use.

In conclusion, no significant adverse impacts are predicted from the preferred alternative. The local population and communities in the area should not be disproportionately adversely affected by any of the alternatives.

#### G. Environmental Impacts

Alternative 1: Take no action. Under this alternative, OSM would not offer remining incentives nor promulgate any rule changes. Without an incentive, there is a likelihood that operators may not remine and reclaim sites that are not at the top of States' priority lists. As a result, the abandoned coal refuse sites that would not be reclaimed without the benefit of an incentive would continue to cause numerous environmental concerns. Negative environmental impacts include: (1) acid drainage and pollution of adjacent streams resulting from the large amounts of pyritic materials that are often present; (2) uncontrolled erosion resulting in stream siltation and downstream flooding; and (3) diminished aesthetic qualities. Potentially acid or toxic materials often result in acid

mine drainage (AMD) on these sites. The ground water and surface water at abandoned coal refuse sites almost always have already been adversely impacted and thus little if any beneficial use can be made of water at abandoned sites. In addition, there is generally little or no topsoil existing on the surface of abandoned refuse sites. Typically, the topsoil was either buried or lost during the original refuse placement. The lack of topsoil causes vegetation to be sparse and of limited diversity and environmental value. Areas of sparse or nonexistent vegetation can impact wildlife habitat because they contain insufficient cover and lack a food source for wildlife. Sediment from refuse disposal sites deposited in streams can affect fish habitat by affecting food sources.

Additionally, the coal refuse sites can present health and safety risks including combustion potential, slope instability, washing and deposition of rock and dirt across public roads, and attractiveness to recreational uses such as off-road vehicle use, that may be unsafe in such adverse conditions.

These environmental and safety problems continue until reclamation is provided under the AML program, or until the site is remined.

Alternative 2: Revise the applicable regulations to offer incentives in the form of waivers of reclamation fees to promote the remining of abandoned coal mine waste piles for reprocessing or direct use off site. Under this alternative, OSM's preferred alternative, OSM would propose new regulations to offer incentives for remining of abandoned coal refuse sites for reprocessing or direct use off site. Operators would not be required to pay fees for coal produced by an abandoned coal refuse mining operation, as defined in section 701.5, that removes all abandoned coal refuse if the fees have been waived pursuant to 30 CFR 785.26 and 870.13(d) that provide for a waiver of reclamation fees as an incentive for remining. The waiver of reclamation fees would apply only to production of coal by removal of abandoned coal refuse for reprocessing or direct use off site.

Implementation of this alternative would facilitate and expedite reclamation of abandoned coal refuse sites by encouraging operators to remine abandoned coal refuse. It would result in environmental improvements, in part by removing the coal refuse, and in part because remining would comply with environmental protection requirements under SMCRA title V. Coal refuse removal, followed by reclamation including grading and revegetating the site, eliminates or significantly reduces environmental problems associated with such sites, including: (1) acid drainage and pollution of adjacent streams resulting from the large amounts of pyritic materials that are often present; (2) uncontrolled erosion resulting in stream siltation and downstream flooding; and (3) diminished aesthetic qualities. This alternative is not anticipated to adversely impact threatened/endangered species, cultural/historical resources, wetland, floodplains, or areas designated by Congress as unsuitable for mining.

This alternative would require no burdensome recordkeeping or complicated application procedures. It could be easily implemented and reduce program costs. It would only minimally impact the amount of money in the Fund.

Because of the relative simplicity of removal operations compared to the complexity of on-site reprocessing, it is likely that operators would favor those remining sites where removal operations for off-site reprocessing could effectively be used. Consequently, it is likely that this alternative would be more effective in reclaiming more land than alternative 1 (no action) as well as alternative 3 (on-site reprocessing). It is also likely to be more effective than alternative 4 (financial assurances) which would likely require potentially burdensome recordkeeping and application procedures and would, therefore, be less appealing to states because it would be difficult to implement. Alternative 2 would also be more effective than alternative 5 (rebates) because alternative 5 also suffers from the burden of recordkeeping and paperwork as well as a delay in receiving the financial benefits.

<u>Alternative 3</u>: Revise the applicable regulations to offer incentives in the form of waivers of reclamation fees to promote the remining of abandoned coal mine waste piles by onsite reprocessing. Under this alternative, OSM would add certain new provisions, at 30 CFR 732.18, 785.26, 870.13(d), and 872.23. Operators would not be required to pay fees for coal produced by an abandoned coal refuse mining operation as defined in section 701.5 that reprocesses all abandoned coal refuse if the fees have been waived pursuant to 30 CFR 785.26 and 870.13(d) that provide for a waiver of reclamation fees as an incentive for remining. The waiver of reclamation fees would apply only to production of coal by on-site reprocessing of abandoned coal mine waste.

Implementation of this alternative would facilitate and expedite reclamation of abandoned coal refuse sites by encouraging operators to remine abandoned coal refuse. This alternative would require no burdensome recordkeeping or complicated application procedures. It could be easily implemented and reduce program costs, and it would not in any way affect availability of AML funds. However, because on-site reprocessing generally requires preparation plants with their associated process water circuits, discharges, and ponds to "clean" the refuse and separate out the coal, on-site reprocessing can produce a significant discharge. Most significantly, on-site reprocessing operations generate residual waste and on-site disposal of the resultant waste material is common. Because the coal refuse would not be removed but rather reprocessed on site, there is a greater potential that adverse environmental impacts could occur. While any adverse impacts would be required to be addressed by the operator, the complexity of on-site reprocessing operations as compared to off-site reprocessing operations usually makes the former more expensive and of longer duration than removal operations.

Because of the complexity of on-site reprocessing as compared to the relative simplicity of removal operations, it is likely that operators would be more likely to favor removal operations when off-site reprocessing could effectively be used. Consequently, it is likely that this alternative would be less effective in reclaiming more land than alternative 2 but more effective than alternative 1 as well as alternatives 4 and 5 (see discussion above), in expediting reclamation and in increasing the amount of land reclaimed.

Alternative 4: Revise the applicable regulations to allow the use of amounts in the Abandoned Mine Reclamation Fund (Fund) established pursuant to section 401 to provide financial assurance for remining operations in lieu of all or a portion of the performance bonds required under section 509. Under this alternative, OSM would revise existing bonding regulations at 30 CFR Part 800 to create a framework for States to use to revise their bonding programs to use monies from the Fund to subsidize the performance bonds required to conduct remining operations.

Implementation of this alternative would likely require potentially burdensome recordkeeping and application procedures. Therefore, it would be difficult to implement. Likewise, this alternative could adversely affect the availability of AML funds for reclamation of priority 1 and 2 sites, and thus could impede or limit reclamation of lands under the AML program. This impediment would be likely because we would expect financial assurances to require relatively large amounts of funding for each operation. Therefore, this alternative could divert larger amounts of AML funds away from the AML program, in order to provide the financial assurances. If so, then States might be less likely to utilize this incentive. Because of these considerations, we anticipate that, compared to alternatives 2 and 3, this type of incentive might be relatively less effective in expediting reclamation and in increasing the amount of land reclaimed. Alternative 4 would be relatively more effective than alternative 1 in expediting reclamation and in increasing the amount of land reclaimed.

Alternative 5: Revise the applicable regulations to offer incentives in the form of rebates of reclamation fees to promote the remining of abandoned coal mine waste piles. Under this alternative, OSM would initiate rulemaking to amend regulations at 30 CFR Parts 870 and 872. Fees for abandoned coal refuse remining operations as defined in section 701.5 would be rebated to operators provided that the regulatory authority determines that, without the rebate, the eligible land would not likely be remined and reclaimed. Operators must estimate reclamation costs as part of their remining permit applications. If the amount of fees that would be rebated would not exceed the cost of the reclamation, the operator would be eligible for a rebate of those fees. In practice, operators would remine the site and pay reclamation fees based on the amount of coal mined as they would with any other Title V permit. At the conclusion of the operation, the operator would request a rebate of those fees. The rebate would be approved if it meets all of the requirements of SMCRA section 415. Implementation of this alternative would likely require somewhat burdensome recordkeeping and application procedures by States. It would be relatively more difficult for operators as well as OSM and States to implement than would be Alternatives 2, 3, and 4. Therefore, we anticipate that this alternative could be less appealing to operators and to States. If relatively fewer States and operators would use this alternative, then this alternative would be correspondingly less effective in expediting reclamation and in increasing the amount of land reclaimed, compared to Alternatives 2, 3, and 4. Alternative 5 would be relatively more effective than alternative 1 in expediting reclamation and in increasing the amount of land reclaimed.

#### H. Summary

This environmental assessment evaluates the potential environmental impacts of a proposed action that would authorize incentives to promote remining of eligible land. Alternative 2 is the preferred alternative. Implementation of the preferred alternative would facilitate and expedite remining of abandoned coal refuse sites by encouraging operators to reclaim abandoned coal mine waste piles. It would result in environmental improvements and would provide environmental protection at the same level provided under sections 515 and 516 of SMCRA. This alternative could be fairly and easily implemented by States who elected to do so. We have not identified any significant negative direct permanent impacts from the preferred alternative.

#### I. Preparer

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### J. References

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