S U M M A R Y

INTRODUCTION

This environmental impact statement (EIS) describes the environmental impacts that would result from amending the permanent program regulations of the Office of Surface Mining Reclamation and Enforcement (OSM) that address valid existing rights (VER) and the application of the prohibitions of section 522(e) of the Surface Mining Control and Reclamation Act (SMCRA) to the subsidence effects of underground coal mining.

Section 522(e) of SMCRA prohibits surface coal mining operations in certain areas, subject to "valid existing rights" and except for those operations which existed on August 3, 1977. Lands designated by section 522(e)(1) include any lands within the boundaries of units of the National Park System; the National Wildlife Refuge System; the National System of Trails; the National Wilderness Preservation System; the Wild and Scenic Rivers System, including study rivers designated under section 5(a) of the Wild and Scenic Rivers Act; and National Recreation Areas designated by Act of Congress. Lands designated by sections 522(e)(2) include any Federal lands within the boundaries of any National Forest. Lands designated by section 522(e)(3) include lands where mining would adversely affect publicly owned parks and properties listed on the National Register of Historic Places. Lands designated by section 522(e)(4) and (5) include lands within 100 feet of public roads and cemeteries; and within 300 feet of occupied dw ellings, public buildings, schools, churches, community or institutional buildings, and public parks.

Any rule changes resulting from this action will apply to future surface coal mining operations in the United States.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION

OSM identified five alternatives for implementing the Valid Existing Rights (VER) exception found in section 522(e) of SMCRA. The five alternatives are **No Action**, **Good Faith All Permits** (preferred VER alternative), **Good Faith All Permits or Takings**, **Ownership and Authority**, and **Bifurcated** which is a combination of Good Faith All Permits and Ownership and Authority. The first alternative, **No Action**, would maintain the status quo and would not require rulemaking. The other four alternatives would result in the promulgation of a rule. The VER definition determines whether a surface coal mining operation is exempt from the prohibitions of section 522(e) in protected areas. In many cases, the definition primarily determines whether surface mining would be allowed. Therefore, discussions of the VER alternatives generally relate to the impacts associated with surface mining.

In addition to the above VER alternatives, there are five alternatives under consideration for determining the applicability of the section 522(e) prohibitions to subsidence resulting from underground coal mining. The alternatives are **No Action**, **Prohibitions Apply**, **Prohibitions Apply If There Is Material Damage**, **Prohibitions Apply If There Is Subsidence**, and **Prohibitions Do** **Not Apply** (preferred prohibitions alternative). The first alternative would maintain the status quo. The other four alternatives would require rulemaking which adopt the policy for determining whether the prohibitions of section 522(e) apply, to subsidence resulting from underground coal mining. Since the prohibitions alternatives determine the degree to which subsidence would be allowed within section 522(e) areas, discussions of the prohibitions alternatives relate to impacts associated with underground mining.

VER ALTERNATIVES

No Action (NA) Alternative

If OSM selects the **NA** alternative, a rule defining VER and establishing implementing procedures would not be promulgated and the status quo would continue. Briefly, OSM would continue to make VER determinations for Federal lands in section 522(e)(1) and (2) are as, because under 30 CFR 745.13(o), the Secretary alone has the authority to determine VER for surface coal mining and reclamation operations on Federal lands within the boundaries of any areas specified under section 522(e)(1) or (2) of the Act. OSM would also continue to make VER determinations on private lands within section 522(e)(1) areas where the Federal interest is affected. OSM would make VER determinations pursuant to the notice published November 20, 1986 (51 FR 41954) in all states except Ohio. In Ohio, OSM would use a takings standard, pursuant to <u>Belville Mining Co., v. Lujan</u> ("<u>Belville I</u>"), No. C-1-89-790 (S.D. Ohio 1991), <u>Mot. for recons. granted</u>, Sept. 18, 1992. Individual states would continue to use their current standards for determining VER.

Good Faith All Permits (GFAP) Alternative (Preferred Alternative)

The **GFAP** standard provides that a person has VER if, prior to the date the land came under the protection of section 522(e), the person or a predecessor in interest had obtained, or made a good faith effort to obtain, all State and Federal permits and other authorizations required to conduct surface coal mining operations. Potentially necessary permits and authorizations include, but are not limited to, SMCRA permits, National Pollutant Discharge Elimination System permits, U.S. Forest Service special use permits, air quality plan approvals, and U.S. Mine Safety and Health Administration ground control plan approvals.

Good Faith All Permits or Takings (GFAP/T) Alternative

Under the **GFAP/T** alternative, a person must either comply with the **GFAP** standard or demonstrate that denial of VER would result in a compensable taking. VER would be found to exist whenever the agency making the VER determination finds that, based on existing takings jurisprudence, denial of VER would be expected to result in a compensable taking of property under the Fifth and Fourteenth Amendments to the United States Constitution.

Ownership and Authority (O&A) Alternative

Under the **O&A** alternative, an individual could establish VER by demonstrating possession of both a right to the coal and the right to mine it by the method intended. Typically, under State

property law, if the deed does not specify a mining method, the type of mining is restricted to that which was in common use in the specific area where the coal is located, at the time that the mineral and surface estates were severed. Adoption of the **O&A** alternative would likely result in the greatest number of determinations that VER did exist.

The **GFAP**, **GFAP**/**T**, **BF**, and **O&A** alternatives also contain several common elements/issues pertaining to private inholdings in section 522(e)(1) areas, the transferability of VER, restrictions on coal exploration in section 522(e) areas, the use of the State versus the Federal definition of VER in certain circumstances, and continually created VER.

Bifurcated (BF) Alternative

Under the **BF** alternative, VER determination standards would be based on the date of severance of the mineral and surface estates, in relation to the date the land came under the protection of section 522(e). When the mineral estate was severed from the surface estate prior to the date that the land came under the protections of section 522(e), VER would be determined based on the **Ownership and Authority** standard. When the mineral estate had not been severed from the surface estate prior to the date the land came under the protection of section 522(e), VER would be based on the **GFAP** standard.

PROHIBITIONS ALTERNATIVES

No Action (NA) Alternative

Under this alternative, OSM would not promulgate rules and OSM would be guided by the Solicitor's Memorandum Opinion (M-36971) of July 10, 1991, which advised that, based on an evaluation of SMCRA, its legislative history, past regulatory actions, and relevant case authority, subsidence from underground mining is properly regulated solely under SMCRA section 516 and not under section 522(e). Section 720 was passed by Congress after the date of the Solicitor's Opinion. Under the status quo, States would regulate subsidence as provided in their approved regulatory programs, including revisions pursuant to section 720.

Prohibitions Do Not Apply (PDNA) Alternative (Preferred Alternative)

Under this alternative OSM would determine through rulemaking that subsidence is not a surface coal mining operation subject to the prohibitions of section 522(e). This rulemaking would conclude, consistent with the Solicitor's opinion, that subsidence from underground coal mining results only from activities that take place below the surface of the land, not from activities conducted on the surface. The rulemaking would conclude that, for underground mining, the SMCRA definition of surface coal mining operations includes only surface activities and the facilities and areas affected by or incidental to these surface activities. Therefore, subsidence from underground mining would not be deemed a surface coal mining operation. The performance standards in sections 516 and 720 of SMCRA and, as set out in SMCRA section 701(28), and the implementing regulations in 30 CFR Parts 783, 784, and 817 would still apply. Surface activities

and facilities related to underground coal mining would be subject to the prohibitions of section 522(e).

Prohibitions Apply If There Is Material Damage (PAMD) Alternative

Under this alternative OSM would determine through rulemaking that subsidence causing material damage would be a surface coal mining operation subject to the prohibitions of section 522(e). Unless an operator can demonstrate that underground mining would not reasonably be expected to result in subsidence that causes material damage, underground mining could be prohibited in section 522(e) areas. Material damage would be as defined in Chapter II. Performance standards set forth in section 516 and 720 of SMCRA and the implementing regulations in 30 CFR Parts 783, 784, and 817 would apply. Surface activities and facilities related to underground coal mining would be subject to the prohibitions of section 522(e).

Prohibitions Apply If There Is Subsidence (PAS) Alternative

Under this alternative OSM would determine through rulemaking that subsidence would be considered a surface mining activity subject to the prohibitions of section 522(e). Mining operations that would cause subsidence within section 522(e) areas in the reasonably foreseeable future would be prohibited unless the applicant could demonstrate to the regulatory authority that no subsidence would occur in the foreseeable future. Performance standards in sections 516 and 720 of SMCRA and the implementing regulations in 30 CFR Parts 783, 784, and 817 would apply. Surface activities and facilities related to underground coal mining would be subject to the prohibitions of section 522(e).

Prohibitions Apply (PA) Alternative

Under this alternative OSM would determine through rulemaking that any potential subsidence would be considered a surface coal mining operation subject to the prohibitions of section 522(e). OSM would deem all underground mining to eventually result in subsidence, and would therefore conclude that all underground mining should be subject to the prohibitions of section 522(e). Depending on the angle of draw, depth, and overburden and seam characteristics, some coal extraction activities located outside the protected area might also be prohibited if it would cause subsidence within the protected area. Performance standards set forth in sections 516 and 720 of SMCRA and the implementing regulations in 30 CFR Parts 783, 784, and 817 would apply. Surface activities and facilities related to underground coal mining would be subject to the prohibitions of section 522(e).

IMPACTS OF PROPOSED ACTION AND ALTERNATIVES

This EIS evaluated the impacts associated with mining in section 522(e) areas through a generic impact analysis. The generic impact analysis indicated that, on a hypothetical site-specific basis, there would be **SIGNIFICANT** impacts to resources in the section 522(e) areas. The specific resources at risk of experiencing significant impacts are air quality, topography, geology, hydrology, wetlands, floodplains, fish and wildlife, soils, vegetation, land use, hydrology, socio-economics,

noise, visual, and recreation. The impacts would tend to be concentrated in section 522(e)(1), (e)(2), (e)(3), and (e)(5) areas.

This EIS also evaluated the likelihood of mining within section 522(e) areas through a model that predicted potential disturbed acreages as compared to the No Action Alternative, or status quo. The acreages predicted by the model indicate that the VER and prohibitions alternatives have different levels of impact on the protected resources. In addition, the impacts associated with the prohibitions alternatives are greatly influenced by the VER alternative selected. The major conclusions of this EIS are as follows:

FOR THE VER ALTERNATIVES

The GFAP VER alternative presents the lowest risk of environmental impact and, provides the greatest level of control to surface owners and resource management agencies in determining whether to allow mining and any associated adverse effects in protected areas. Under this alternative, relatively few areas protected by section 522(e) would be adversely affected by surface coal mining operations resulting from VER determinations.

The GFAP/T, O&A, and the BF alternatives provide the greatest potential risk of surface mining in protected areas. In comparison to the No Action alternative, approximately 185 to 304 acres within section 522(e)(1) lands (Federal parks, refuges, and national trails), 1,000 additional acres within eastern national forests, and 990 acres of State park lands could be subject to surface coal mining operations because of VER determinations under these alternatives over the next 20 years.

Subject to Congressional appropriations, section 522(e)(1) areas have the additional protection of a Department of Interior policy to acquire property interests on which a person seeks to exercise VER to conduct surface coal mining operations. There were no projected buy-out costs for the GFAP alternative. Potential discounted buy-out costs (see economic analysis) under the least restrictive VER (O&A) alternative are estimated as \$4.18 million over the next 20 years.

Surface mining impacts to section 522(e) lands have occurred in the past and are likely to continue to occur irrespective of the VER alternative selected. More specifically, impacts to westem national forests, sites listed on the National Register of Historic Places, roads, and occupied dwellings are largely the result of compatibility findings and waivers granted by surface owners and land management agencies.

Changes in the VER definition are not expected to substantially alter the extent to which lands are disturbed through surface mining in western National Forests, historic sites, road buffers, and occupied dwelling buffers.

Issues common to the alternatives are responsibility for VER determinations on non-Federal lands in section 522(e)(1) areas, VER transferability, continually created VER, the needed for and adjacent standard, restrictions on coal exploration operations in section 522(e) areas, and the use of the Federal versus the State definition of VER in certain circumstances.

FOR THE PROHIBITIONS ALTERNATIVES

Subsidence-related impacts to section 522(e) lands have occurred in the past, and, are likely to continue to occur irrespective of the prohibition alternative in place. Impacts from underground mining operations on National Forest lands, historic sites listed on the National Register of Historic Places, and roads are largely controlled through compatibility findings and waivers granted by surface owners and land managers. Once underground mining companies address financial and environmental concerns related to subsidence impacts, OSM believes that surface owners and land managers of National Forest lands, historic sites listed on the National Register of Historic Places, and roads would also provide compatibility findings for National Forests, or waivers under the PA alternative.

Potential subsidence impacts to section 522(e)(1) lands, occupied dwellings, and State and local public parks would be affected by the VER definition. The less restrictive VER alternatives essentially eliminate the protections of the PA, PAS, and PAMD prohibitions alternatives because VER would be relatively easy to establish.

Under the PDNA alternative, approximately 3,500 acres of section 522(e)(1) lands may be affected by subsidence from underground mining. The majority of the lands predicted to be affected are within eastern units of The National Park System, National Trails System, Wilderness Preservation System, and National Recreational Areas.

Under the PDNA alternative, 12,600 acres of State park lands could be affected by subsidence-related impacts over a 20-year period. Impacts to State and local parks under the PDNA alternative may be reduced by as much as 45% when applied in combination with the GFAP VER alternative. The approximate 45% reduction in potential subsidence impacts under the GFAP VER alternative results from the inability of mineral owners to establish surface support facilities (roads, ventilation, additional face-up areas) needed to access all coal reserves within the protected area by underground methods.

Under the PDNA alternative, the greatest level of impact occurs to section 522(e)(5) occupied dwellings, with approximately 158,000 acres (29,600 dwellings) affected over a 20-year period. While this predicted impact is partially mitigated through regulatory requirements, it does represent a significant amount of disruption to the dwelling owners, families, and communities.

The PA alternative, in combination with the GFAP VER alternative, provides the greatest potential protection of section 522(e) areas. Under this combination of alternatives, impacts to section 522(e)(1) lands, State and local parks, and churches, schools, cemeteries, and public buildings are avoided. In addition, impacts to historic sites, roads, and occupied dwellings would be reduced.

The impacts to environmental resources associated with the combination of the PA and GFAP Alternative are determined, in large part, by the rate at which dwelling owners would withhold waivers allowing subsidence from underground mining. Waiver denial rates are not known, and because they would be based on a large number of variables specific to each proposed operation, they cannot be reliably predicted.

Under the PA alternative, if the dwelling owner waiver denial rate is between 2% to 8%, the effect on the economy would likely be a savings of \$5 million to \$7.7 million (discounted) in reduced dwelling and road repair costs over the next 20 years as compared to expenditures under the PDNA alternative.

If the dwelling owner waiver denial rate under the PA Alternative is between 10% to 50%, there could be as much as a \$62.5 million (discounted) savings in reduced dwelling and road repairs over the next 20 years. However, the additional protections under the 10% to 50% dwelling owner denial rate would result in over \$2.6 billion (discounted) in increased coal production costs to the U.S. economy over the same period.

Subject to appropriations, section 522(e)(1) areas have the additional protection of a Department of Interior policy to acquire property interests on which a person seeks to exercise VER to conduct surface coal mining operations. The total potential buy-out cost under the prohibitions and VER alternative combinations that consider subsidence to be a surface coal mining operation is \$25.779 million (discounted) over the next 20 years.