

**4310-05-P**

**DEPARTMENT OF THE INTERIOR**

**Office of Surface Mining Reclamation and Enforcement**

**30 CFR Part 761**

**RIN 1029-AB82**

**Interpretative Rule Related to Subsidence Due to Underground Coal Mining**

**AGENCY:** Office of Surface Mining Reclamation and Enforcement, Interior.

**ACTION:** Final rule and Record of Decision.

**SUMMARY:** The Office of Surface Mining Reclamation and Enforcement interprets sections 522(e) and 701(28) of the Surface Mining Control and Reclamation Act of 1977 and implementing rules to provide that subsidence due to underground mining is not a surface coal mining operation. Subsidence therefore is not prohibited in areas protected under the Act . Neither subsurface activities that may result in subsidence, nor actual subsidence, are prohibited on lands protected by section 522(e). Subsidence is subject to regulation under other applicable provisions of the Surface Mining Control and Reclamation Act of 1977, primarily sections 516 and 720.

**EFFECTIVE DATE:** [INSERT DATE 30 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER]

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## **SUPPLEMENTARY INFORMATION:**

### Table of Contents

#### I. Background.

A. Why is OSM doing this rulemaking?

B. What process did OSM use to develop the final rule?

C. How is this rule related to the valid existing rights rulemaking?

D. What statutory language is OSM interpreting?

1. Prohibition on surface coal mining operations - section 522(e).

2. Definition of surface coal mining operations - section 701(28).

E. What other SMCRA provisions are relevant?

1. Surface effects of underground coal mining operations - section 516.

2. Subsidence - section 720.

F. What existing regulations are relevant?

1. Provisions implementing SMCRA sections 522(e) and 701(28).

Part 740

2. Provisions implementing SMCRA sections 516 and 720.

Section 784.20

Section 817.121

#### II. Discussion of Final Rule.

A. Do the prohibitions of section 522(e) apply to subsidence from underground mining?

B. What is the rationale for the final rule?

1. Statutory language.
2. Legislative history.
3. Policy considerations.
  - a. This rule resolves questions about our interpretation of statutory provisions.
  - b. This rule balances economic and environmental considerations.
  - c. This rule avoids a regulatory gap.
  - d. This rule balances the interests of surface owners and industry.
  - e. This rule maintains stability in SMCRA implementation.
  - f. This rule promotes safety.
  - g. This rule acknowledges existing property rights.

### III. Response to Comments.

- A. SMCRA definition of surface coal mining operations.
- B. Congressional intent.
- C. History of interpretation as to applicability of section 522(e) prohibitions to subsidence.
- D. Regulatory gap--Adequacy of SMCRA protection of 522(e) features from subsidence damage.
- E. Impacts on underground mining if prohibitions do apply to subsidence.
- F. Codification of the final rule.

### IV. Procedural Matters.

- A. Executive Order 12866: Regulatory Planning and Review.
- B. Regulatory Flexibility Act.
- C. Small Business Regulatory Enforcement Fairness Act.

- D. Unfunded Mandates Reform Act of 1995.
- E. Executive Order 12630: Takings.
- F. Executive Order 13132: Federalism.
- G. Executive Order 12988: Civil Justice Reform.
- H. Paperwork Reduction Act.
- I. National Environmental Policy Act of 1969 and Record of Decision.

## **Background**

### **A. Why is OSM doing this rulemaking?**

The Surface Mining Control and Reclamation Act of 1977 (Public Law 95-87, 30 U.S.C. 1201 et seq.) (SMCRA or the Act) prohibits surface coal mining operations on all lands designated in section 522(e), subject to valid existing rights and except for those operations which existed on August 3, 1977. Lands designated in section 522(e)(1)-(5) include:

- any lands within the boundaries of units of the National Park System;
- Federal lands within National Forests; publicly owned parks;
- properties listed on the National Register of Historic Places;
- buffer zones around public roads, homes, public buildings, schools, churches, community and institutional buildings; and
- cemeteries.

Section 701(28) defines surface coal mining operations.

This interpretive rulemaking is in part the result of litigation concerning the applicability of:

- the section 522(e)(4) prohibition to underground mining within 100 feet of any public road;

and

- the (e)(5) prohibition to underground mining within 300 feet from any occupied dwelling, unless waived by the owner, or within 300 feet of public buildings or public parks, or within 100 feet of a cemetery.

In that litigation, environmental and citizen plaintiffs contended that our regulations implementing SMCRA section 522(e), at 30 CFR 761.11(d) through (g), did not explicitly prohibit subsidence from underground mining in 522(e)(4) and (5) areas. Citizen Plaintiffs Mem. Round III of In Re: Permanent Surface Mining Regulation Litigation, No. 79-1144, (D.D.C. 1985) [hereafter, In Re: Permanent (II)] at 56. There is still disagreement over whether and to what extent subsidence and underground mining which causes or is expected to cause subsidence, are prohibited. Environmental and citizen groups believe all subsidence is prohibited. Industry groups believe subsidence is not covered by the prohibitions. In its decision on the issue, the court affirmed our regulations, stating that they track the statutory language, while noting that the Secretary had committed to further rulemaking on the applicability of sections 522(e)(4) and (5) to underground mining. In Re: Permanent (II), Mem. Op. at 70 (July 15, 1985).

In 1988, we issued a proposed rule to address the issue. *See* 53 FR 52374, Dec. 27, 1988. In 1989, we withdrew the proposed rule for further study due to the comments we received and our analysis indicating that this was fundamentally a legal issue. 54 FR 30557, July 21, 1989. We then decided to seek a formal opinion on this matter from the Department of the Interior's Office of the Solicitor. The Solicitor completed his review of this issue in July 1991, and concluded that the best interpretation of SMCRA is that subsidence is not a surface coal mining operation subject to the prohibitions of § 522(e). Memorandum Opinion of the Solicitor, Department of the Interior, M-36971, Applicability of Section 522(e) of the Surface Mining Control and Reclamation Act to Subsidence (100 I.D. 85 (1993)) [hereafter, the M-Op ].

The M-Op is based on an extensive analysis of the statute, the legislative history, relevant case authority and our regulatory actions with respect to the applicability of section 522(e) to subsidence from underground mining. The M-Op:

- concluded that Congress did not intend for the prohibitions of section 522(e) to apply to subsidence from underground mining and
- noted that OSM may regulate subsidence solely under section 516 of SMCRA and not under section 522(e).

The M-Op recognizes that regulation under section 516 may not have the same effect as regulation under section 522(e). At the same time, the analysis of the statute and legislative history supports the conclusion that regulation under section 516 will achieve full protection of the environmental values which Congress sought to protect from subsidence under the Act while encouraging longwall mining.

On July 18, 1991, we published a Notice of Inquiry (NOI) which stated that no further rulemaking action was necessary in regard to the applicability of section 522(e) prohibitions to underground mining. The NOI stated that we based this conclusion upon our review of the Act and the legislative history, the comments received on the December 27, 1988, proposal, and the M-Op. We concluded that the regulations, at 30 CFR 761.11 (d), (e), (f) and (g), adequately addressed underground mining and appropriately applied the statutorily-established buffer zones in a horizontal dimension only. 56 FR 33170.

On September 6, 1991, the National Wildlife Federation (NWF) filed suit against the Secretary challenging the July 18 NOI and the July 10 M-Op, on the applicability of 522(e) of SMCRA to subsidence. National Wildlife Federation (NWF) v. Babbitt, 835 F. Supp. 654 (D.D.C. September 21,

1993). The NWF contended that both the M-Op and the NOI violated the requirements of the Administrative Procedure Act (APA), the National Environmental Policy Act (NEPA), and SMCRA. NWF requested, among other things, that the court order OSM to undertake rulemaking to determine the applicability of section 522(e) to subsidence, and vacate the M-Op and the NOI. In addition, the Interstate Mining Compact Commission (IMCC) and a number of industry groups, including the National Coal Association (NCA) and American Mining Congress (AMC), filed a motion to intervene as defendants in this action. The court granted that motion .

The district court vacated the NOI on September 21, 1993, on procedural grounds, and remanded the case to the Secretary for rulemaking on the applicability of section 522(e) to subsidence, in accordance with the notice and comment procedures of the APA, 5 U.S.C. section 551 et seq. National Wildlife Federation (NWF) v. Babbitt, 835 F. Supp. 654 (D.D.C. September 21, 1993).

#### **B. What process did OSM use to develop the final rule?**

This final rule is based upon a proposed rule published for public review and comment on January 31, 1997 (62 FR 4864). We also posted the proposed rule and associated documents on the OSM home page on the Internet. In response to requests from the public, we held public hearings on the proposed rule in Athens, Ohio; Billings, Montana; Washington, Pennsylvania; and Whitesburg, Kentucky. The comment period was originally scheduled to close June 2, 1997, but, in response to several requests, we extended the deadline until August 1, 1997. 62 FR 29314, May 30, 1997.

In addition to the testimony offered at the four hearings, we received approximately 491 written comments on the proposed rule (430 from private citizens, 40 from companies and associations affiliated with the mining industry, 9 from environmental organizations, and 12 from Federal, State, and local governmental entities and associations). We considered all comments and hearing transcripts in developing the final rule. With the exception of comments that did not address the substance or merits of the proposed rule, the preamble summarizes the major types of comments received and their disposition.

In addition to the changes made in response to comments, we have written this document in plain language, using better organization, more concise sentences, and pronouns. .

### **C. How is this rule related to the valid existing rights rulemaking?**

Under section 522(e), surface coal mining operations are prohibited in specified areas unless a person can demonstrate a valid existing right to mine the coal resources, or can meet one of the other statutory exceptions to the prohibitions. SMCRA does not define the term "valid existing rights" (VER). In a separate rulemaking, published in this issue of the Federal Register, we define valid existing rights, establish standards for VER, tell how to submit a VER claim, and explain how we will process claims. .

That separate rulemaking establishes a good faith all permits primary standard for VER, which provides that a person has VER if, before the land came under the protection of section 522(e), the person had obtained, or made a good faith effort to obtain, all necessary permits. In general, access to coal resources within western National Forests, and within protected historic sites, road buffers, and occupied dwellings buffers is largely gained by processes other than VER



(compatibility findings, waivers, and avoidance). In addition, even though access to coal under churches, schools, public buildings, and cemeteries is generally dependent upon establishing VER, these protected areas are encountered at a frequency that generally allows mining operations to readily avoid them.

The EIS accompanying this rulemaking concludes that, overall, the areas most likely to be impacted through successful VER determinations appear to be:

- Section 522(e)(1) lands;
- State and local parks; and
- Some areas contained in eastern National Forests.

The good faith all permits standard is likely to have the least environmental impact and allow surface owners and resource management agencies the greatest control to decide whether to authorize adverse effects to protected areas. Under this standard, it appears that few, if any, areas protected by section 522(e) would be mined under VER determinations. *See Final Environmental Impact Statement: Proposed Revisions to the Permanent Program Regulations Implementing Section 522(e) of the Surface Mining Control and Reclamation Act of 1977 and Proposed Rulemaking Clarifying the Applicability of Section 522(e) to Subsidence from Underground Mining*, OSM-EIS-29 (July, 1999). [hereafter, "Final EIS, 1999"]. We don't expect the good faith all permits VER standard to significantly limit underground mining access to coal in areas protected under section 522(e). This is in part because, under this rulemaking, subsidence is not prohibited under section 522(e).

We analyzed the relative impacts of the various combinations of alternatives for the two rules in an Environmental Impact Statement (EIS) and an Economic Analysis (EA) that addressed the two

rulemakings. The National Environmental Policy Act requires an EIS when a rulemaking will have a significant effect on the quality of the human environment. An EA is required when a rule is considered significant regulatory action under the criteria of Executive Order 12866. In 1994, we published a notice in the Federal Register (59 FR 21996) of our intent to prepare an EIS and EA on these two issues. The scoping process for the support documents identified several impact issues regarding the proposed rulemakings.

Simultaneously with the two proposed rulemakings published in January 1997, we published for review and comment a draft EIS (U.S. Department of the Interior. Office of Surface Mining Reclamation and Enforcement. Draft Environmental Impact Statement Valid Existing Rights, Proposed Revisions to the Permanent Program Regulations Implementing Section 522(e) of the Surface Mining Control and Reclamation Act of 1977 and Proposed Rulemaking Clarifying the Applicability of Section 522(e) to Subsidence from Underground Mining, OSM-EIS-29, September 1995).

We also made available for review and comment a draft EA (U.S. Department of the Interior. U.S. Geological Survey and Office of Surface Mining Reclamation and Enforcement. Draft Economic Analysis Valid Existing Rights, Proposed Revisions to the Permanent Program Regulations Implementing Section 522(e) of the Surface Mining Control and Reclamation Act of 1977 and Proposed Rulemaking Clarifying the Applicability of Section 522(e) to Subsidence from Underground Mining, March 1996).

The final EIS and EA provide detailed responses to comments on the draft support documents. *See*, Final EIS, 1999; Final Economic Analysis, Rulemaking Alternatives for a Standard for Valid Existing Rights and for the Rulemaking Alternatives for Application of 522(e) Prohibitions to

Underground Mining, prepared by U.S. Geological Survey and U.S. Office of Surface Mining, (July, 1999). (Hereafter "Final EA , 1999").

#### **D. What statutory language is OSM interpreting?**

##### **1. Prohibition on surface coal mining operations - section 522(e)**

SMCRA prohibits surface coal mining operations on all lands designated in section 522(e), subject to valid existing rights and except for those operations which existed on August 3, 1977. Congress determined that the nature and purpose of section 522(e) areas and land uses were incompatible with surface coal mining operations. *See* S. Rep. No. 128, 95th Cong. 1st Sess. 55 (1977). Under section 522(e), if a person who proposes to conduct a surface coal mining operation on protected lands does not qualify for one of the statutory exceptions, then the person cannot conduct the intended operation on such lands, and the permit area cannot include those lands. *See* 30 CFR § 773.15(c)(3)(ii). Section 522(e), subject to specified exceptions, states that no surface coal mining operations shall be permitted on lands designated in subsections (e) (1) through (5). Section 522(e) does not specifically mention subsidence.

Section 522(e) provides, in relevant part, as follows:

After the enactment of this Act and subject to valid existing rights no surface coal mining operations except those which exist on the date of enactment of the Act shall be permitted--

(1) on any lands within the boundaries of units of the National Park System, the National Wildlife Refuge Systems, 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;

(2) on any Federal lands within the boundaries of any national forest: Provided, however,

That surface coal mining operations may be permitted on such lands if the Secretary finds that there are no significant recreational, timber, economic, or other values which may be incompatible with such surface mining operations and --

(A) surface operations and impacts are incident to an underground coal mine; or

(B) where the Secretary of Agriculture determines, with respect to lands which do not have significant forest cover within those national forests west of the 100th meridian, that surface mining is in compliance with the Multiple-Use Sustained-Yield Act of 1960, the Federal Coal Leasing Amendments Act of 1975, the National Forest Management Act of 1976, and the provisions of this Act: And provided further, That no surface coal mining operations may be permitted within the boundaries of the Custer National Forest;

(3) which will adversely affect any publicly owned park or places included in the National Register of Historic Sites unless approved jointly by the regulatory authority and the Federal, State, or local agency with jurisdiction over the park or the historic site;

(4) within one hundred feet of the outside right-of-way line of any public road, except where mine access roads or haulage roads join such right-of-way line and except that the regulatory authority may permit such roads to be relocated or the area affected to lie within one hundred feet of such road, if after public notice and opportunity for public hearing in the locality a written finding is made that the interests of the public and the landowners affected thereby will be protected; or

(5) within three hundred feet from any occupied dwelling, unless waived by the owner thereof, nor within three hundred feet of any public building, school, church, community, or institutional building, public park, or within one hundred feet of a cemetery.

30 U.S.C. 1272(e) (emphasis added).

## **2. Definition of surface coal mining operations - section 701(28)**

The prohibitions of section 522(e) of SMCRA apply to "surface coal mining operations." Thus, determining the scope of the prohibitions requires an understanding of the definition of the term "surface coal mining operations" in section 701(28). As defined in section 701(28), "surface coal mining operations" specifically includes certain aspects of underground coal mining. However, the definition does not specifically mention subsidence.

Section 701(28) provides in full as follows:

"surface coal mining operations" means--

(A) activities conducted on the surface of lands in connection with a surface coal mine or subject to the requirements of section 1266 of this title surface operations and surface impacts incident to an underground coal mine, the products of which enter commerce or the operations of which directly or indirectly affect interstate commerce. Such activities include excavation for the purpose of obtaining coal including such common methods as contour, strip, auger, mountaintop removal, box cut, open pit, and area mining, the uses of explosives and blasting, and in situ distillation or retorting, leaching or other chemical or physical processing, and the cleaning, concentrating, or other processing or preparation, loading of coal for interstate commerce at or near the mine site: Provided, however, That such

activities do not include the extraction of coal incidental to the extraction of other minerals where coal does not exceed 16 2/3 per centum of the tonnage of minerals removed for purposes of commercial use or sale or coal explorations subject to section 512 of this Act; and

(B) the areas upon which such activities occur or where such activities disturb the natural land surface. Such areas shall also include any adjacent land the use of which is incidental to any such activities, all lands affected by the construction of new roads or the improvement or use of existing roads to gain access to the site of such activities and for haulage, and excavations, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, processing areas, shipping areas and other areas upon which are sited structures, facilities, or other property or materials on the surface, resulting from or incident to such activities.

30 U.S.C. 1291(28).

## **E. What other SMCRA provisions are relevant?**

### **1. Surface effects of underground coal mining operations - section 516**

Section 516 establishes the regulatory requirements for the surface effects of underground coal mining, including provisions for the control of subsidence from underground coal mining. SMCRA section 516 provides in relevant part:

- (a) The Secretary shall promulgate rules and regulations directed toward the surface effects of underground coal mining operations, embodying the following

requirements and in accordance with the procedures established under section 501 of this Act: Provided, however, That in adopting any rules and regulations the Secretary shall consider the distinct difference between surface coal mining and underground coal mining. . . .

. . . .

(b) Each permit issued under any approved State or Federal program pursuant to this Act and relating to underground coal mining shall require the operator to-

(1) adopt measures consistent with known technology in order to prevent subsidence causing material damage to the extent technologically and economically feasible, maximize mine stability, and maintain the value and reasonably foreseeable use of such surface lands, except in those instances where the mining technology used requires planned subsidence in a predictable and controlled manner: Provided, That nothing in this subsection shall be construed to prohibit the standard method of room-and-pillar mining;

. . . .

(8) eliminate fire hazards and otherwise eliminate conditions which constitute a hazard to health and safety of the public;

. . . .

(11) to the extent possible using the best technology currently available, minimize disturbances and adverse impacts of the operation on fish, wildlife, and related environmental values, and achieve enhancement of such resources where practicable. . . .

....

- (c) In order to protect the stability of the land, the regulatory authority shall suspend underground coal mining under urbanized areas, cities, towns, and communities and adjacent to industrial or commercial buildings, major impoundments, or permanent streams if he finds imminent danger to inhabitants of the urbanized areas, cities, towns, and communities.
- (d) The provisions of this subchapter relating to State and Federal programs, permits, bonds, inspections and enforcement, public review, and administrative and judicial review shall be applicable to surface operations and surface impacts incident to an underground coal mine with such modifications to the permit application requirements, permit approval or denial procedures, and bond requirements as are necessary to accommodate the distinct difference between surface and underground coal mining. . . .

30 U.S.C. 1266.

## **2. Subsidence - section 720**

Section 720 of SMCRA was added by the Energy Policy Act of 1992, Pub. L. 102-486, 106 Stat. 2776 (1992). (Hereafter EPAct ). The statute was enacted on October 24, 1992. Section 720 provides, in relevant part:

- (a) Underground coal mining operations conducted after Oct. 24, 1992 shall comply with each of the following requirements:
  - (1) Promptly repair, or compensate for, material damage resulting from subsidence caused to any occupied residential dwelling and structures related thereto, or non-



commercial building due to underground coal mining operations. Repair of damage shall include rehabilitation, restoration, or replacement of the damaged occupied residential dwelling and structures related thereto, or non-commercial building.

Compensation shall be provided to the owner of the damaged occupied residential dwelling and structures related thereto or non-commercial building and shall be in the full amount of the diminution in value resulting from the subsidence. . . .

- (2) Promptly replace any drinking, domestic, or residential water supply from a well or spring in existence prior to the application for a surface coal mining and reclamation permit, which has been affected by contamination, diminution, or interruption resulting from underground coal mining operations.

Nothing in this section shall be construed to prohibit or interrupt underground coal mining operations.

30 U.S.C. 1319a.

## **F. What existing regulations are relevant?**

### **1. Provisions implementing SMCRA sections 522(e) and 701(28)**

Section 522(e) is implemented in large part at 30 CFR Part 761, which sets forth the procedures and standards to be followed in determining whether a proposed surface coal mining and reclamation operation is excepted from the prohibitions and limitations of section 522(e). Part 761 reiterates the areas on which section 522(e) prohibits surface coal mining operations. Part 761 also reiterates the exceptions to the statutory prohibitions, and the procedures to be followed in

determining whether an operation qualifies for an exception to the prohibitions. Part 761 is the subject of the rulemaking which accompanies this final rule in the Federal Register.

As noted previously, if a proposed operation includes Federal lands within the boundaries of any areas specified under section 522(e)(1) or (2), a determination of valid existing rights for surface coal mining and reclamation operations must be made. Part 740 describes the responsibilities of the Secretary, various Federal agencies and the States for regulating surface coal mining and reclamation operations on Federal lands under SMCRA, the Mineral leasing Act and other applicable Federal laws, regulations and executive orders. Section 740.4(a) provides that the Secretary is responsible for determining valid existing rights for surface coal mining and reclamation operations on Federal lands within 522(e)(1) or (2) areas. Valid existing rights determinations on such areas are of such national importance that the Secretary retains this responsibility to carry out the congressional mandate to protect these areas and to ensure that there will be no prohibited surface coal mining operations on Federal lands in national parks and national forests. *See* 48 FR 6917, Feb. 16, 1983.

The regulatory definition of surface coal mining operations adopted in the permanent program regulations tracks the statutory definition very closely, except that the regulations specifically include extraction of coal from coal refuse piles. *See* 44 FR 14914, Mar. 13, 1979. In keeping with SMCRA section 701(28)(A), the definition of surface coal mining operations under section 700.5 provides:

- (a) activities conducted on the surface of lands in connection with a surface coal mine or, subject to the requirements of section 516 of the Act, surface operations and surface impacts incident to an underground coal mine, the products of which enter commerce or the

operations of which directly or indirectly affect interstate commerce. Such activities include excavation for the purpose of obtaining coals, including such common methods as contour, strip, auger, mountaintop removal, box cut, open pit, and area mining; the use of explosives and blasting; and in situ distillation or retorting; leaching or other chemical or physical processing; and the cleaning, concentrating, or other processing or preparation of coal. Such activities also include the loading of coal for interstate commerce at or near the mine site.

*Provided*, these activities do not include the extraction of coal incidental to the extraction of other minerals, where coal does not exceed 16 2/3 percent of the tonnage of minerals removed for purposes of commercial use or sale, or coal exploration subject to section 512 of the Act; and, *Provided further*, that excavation for the purpose of obtaining coal includes extraction of coal from coal refuse piles; and

(b) The areas upon which the activities described in paragraph (a) of this definition occur or where such activities disturb the natural land surface. These areas shall also include any adjacent land the use of which is incidental to any such activities, all lands affected by the construction of new roads or the improvement or use of existing roads to gain access to the site of those activities and for haulage and excavation, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, processing areas, shipping areas and other areas upon which are sited structures, facilities, or other property or material on the surface, resulting from or incident to those activities.

## 2. Provisions implementing SMCRA sections 516 and 720

Sections 516 and 720 are implemented in large part at 30 CFR Parts 784 and 817, which set forth, respectively, permitting requirements and performance standards for underground mining activities.

Part 784 includes § 784.20, which sets out requirements for a subsidence control plan, including a pre-subsidence survey. The pre-subsidence survey must include a map that shows the type and location within the proposed permit area or adjacent area, of structures and renewable resource lands that subsidence may materially damage, or for which the reasonably foreseeable use may diminished by subsidence. The maps must also show the type and location within the proposed permit area or adjacent area, of drinking, domestic, and residential water supplies that could be contaminated, diminished, or interrupted by subsidence. In addition, a narrative is required that must indicate whether subsidence, if it occurred, could cause material damage to, or diminish the value or reasonably foreseeable use of the structures and renewable resource lands. The narrative is also required to indicate whether subsidence, if it occurred, could contaminate, diminish, or interrupt the drinking, domestic, or residential water supplies.

Section 784.20(a)(3) sets out requirements for a presubsidence structural condition survey. On April 27, 1999, the U.S. Court of Appeals for the District of Columbia vacated:

- Our rebuttable presumption that, when subsidence damage occurs within the angle of draw damage was caused by the related underground mine (30 CFR 817.121(c)(4)). National Mining Ass n v. Babbitt, 172 F.3d 906 (D.C. Cir 1999) (hereafter, NMA ).

- Our regulation at § 784.20(a)(3) requiring a pre-subsidence structural condition survey, insofar as that regulation is interconnected with the angle of draw regulation. (The court held that we have

the authority to require such a survey, but vacated the regulation because it defines the area in which the survey is required by reference to the angle of draw. Id.)

Under § 784.20 the pre-subsidence survey must identify the quantity and quality of all drinking, domestic, and residential water supplies within the proposed permit area and adjacent area that could be contaminated, diminished, or interrupted by subsidence. The applicant must provide copies of the survey and any technical assessments or engineering evaluations to the property owner and regulatory authority.

Section 784.20(b) requires a subsidence control plan if the initial survey, required under § 784.20(a), shows that subsidence could cause material damage to identified structures or renewable resource lands. The subsidence control plan must include a map and physical description of the proposed underground operation and type of mining, a description of the monitoring, and details of the subsidence control monitoring measures. Longwall operations must either (1) describe the methods to be used to minimize damage to structures identified in the Energy Policy Act or (2) demonstrate that the costs of minimizing damage exceed the anticipated costs of repair. In addition, the operator must submit a description of the measures to replace adversely affected protected water supplies or to mitigate subsidence-related material damage to land and protected structures.

Other regulations in Part 784 ensure that each permit application contains the information necessary to determine that the operation will protect water supplies and reclaim the land after mining is completed. For example, these regulations require the application to include information on ground water and surface water quality and quantity sufficient to demonstrate seasonal variation and water usage. In addition, an analysis of both suspended and dissolved constituents helps determine the presence of heavy metals in the water supply. In particular, requirements ensure that,

prior to mining, the permittee demonstrate whether the proposed operation may result in contamination, diminution, or interruption of a well or spring within a proposed permit area or adjacent area which is used for domestic, drinking or residential purposes. Moreover, throughout the application process, the regulatory authority may require additional information necessary to assure that the proposed operation will protect the hydrologic balance and to understand the potential impacts of the operation.

The provisions concerning subsidence control in Part 817 include performance standards which require the prevention of material damage and maintaining the value and reasonably foreseeable use of surface lands, or using mine technology for planned subsidence in a predictable and controlled manner; compliance with the subsidence control plan; repair of material damage; and a detailed plan of underground workings. See 30 CFR 817.121.

Specifically, § 817.121(a)(1) requires that the operator must either adopt measures consistent with known technology which prevent subsidence causing material damage to the extent technologically and economically feasible, maximize mine stability, and maintain the value and reasonably foreseeable use of surface lands; or adopt mining technology which provides for planned subsidence in a predictable and controlled manner.

Under § 817.121(a)(2), the operator of a mine using a planned subsidence technology must minimize damage to non-commercial buildings and occupied residential dwellings and related structures. The operator is obliged to take minimization measures that are technologically and economically feasible.

Section 817.121(c)(1) requires repair of material damage from subsidence to surface lands, to the extent technologically and economically feasible. The operator must restore the land to a

condition capable of maintaining the value and reasonably foreseeable uses that it was capable of supporting before subsidence. Section 817.121(c)(2) requires that an operator promptly repair or compensate for material damage from subsidence to non-commercial buildings or occupied residential dwellings or related structures. These requirements apply to subsidence-related damage caused by underground mining activities conducted after October 24, 1992.

As noted above, on April 27, 1999, the U.S. Court of Appeals for the District of Columbia vacated the rebuttable presumption in § 817.121(c)(4). (NMA, supra.) That rule provided that if damage to non-commercial buildings or occupied residential dwellings and related structures occurs as a result of earth movement within the area determined by projecting a specified angle of draw from underground mine workings to the surface, a rebuttable presumption exists that an operator caused the damage.

Additional regulations detailed in Part 817 ensure that underground mining is conducted so as to protect the health and safety of the public, minimize damage to the environment, and protect the rights of landowners. These regulations require that all underground mining activities are conducted in a manner which preserves and enhances environmental and other values in accordance with SMCRA. Included are additional protections from subsidence-related damage from underground mining activities. For example, § 817.41(j) requires the prompt replacement of any drinking, domestic or residential water supply, in existence before the date of the permit application, that is contaminated, diminished or interrupted by underground mining activities conducted after October 24, 1992.

## **II. Discussion of Final Rule**

### **A. Do the prohibitions of section 522(e) apply to subsidence from underground mining?**

We interpret section 522(e) as not applying to subsidence from underground mining activities, or to the underground activities that may lead to subsidence.

### **B. What is the rationale for the final rule?**

For the reasons set forth below, we interpret section 522(e) in light of the statutory definition of "surface coal mining operations" in section 701(28), as not applying to subsidence from underground mining. We've based the final rule on extensive analysis of the statute, the legislative history, relevant case authority, our regulatory actions with respect to the applicability of section 522(e) to subsidence from underground mining, and consideration of all relevant comments. We conclude that the best reading of section 701(28) is that surface coal mining operations does not include subsidence, and that therefore the prohibitions of section 522(e) do not apply to subsidence from underground mining. We believe that this is consistent with legislative intent, and that subsidence is properly regulated under sections 516 and 720 and related regulatory provisions of SMCRA and not under section 522(e). While we recognize that regulation under sections 516 and 720 may not have precisely the same effect as regulation under section 522(e), based on our analysis we conclude that regulation under sections 516 and 720 will achieve full protection of the environmental values which Congress sought to protect from subsidence under the Act while encouraging longwall mining. We believe that this interpretation will promote the general statutory scheme of SMCRA and fully protect the environment and the public interest. We also believe this interpretation best balances all relevant policy considerations.



## 1. Statutory language

Section 522(e) prohibits surface coal mining operations. However, the definition of "surface coal mining operations" in SMCRA section 701(28) is not a model of clarity. We believe a careful reading of the Act indicates Congress' intent that the SMCRA definition of "surface coal mining operation" does not include subsidence. Therefore, we conclude that the best reading of the law is that section 522(e) does not apply to subsidence. We base this conclusion on:

- (1) A rigorous reading of section 701(28);
- (2) Analysis of the language of sections 516, 522(e) and 701(28) of SMCRA; and
- (3) A consideration of other relevant statutory provisions, including the congressional findings and purposes in sections 101(b) and 102(k).

We believe that paragraph (A) of section 701(28), and the analogous provision in the existing rules at 30 CFR 700.5, apply to "activities conducted on the surface of lands." Thus, subsidence is not included in paragraph (A) of the definition because it is not an activity conducted on the surface of the land. This interpretation is consistent with the fact that there is no mention in paragraph (A) of subsidence, underground activities, or surface impacts of underground activities, which might clearly establish that section 701(28) did include subsidence. By contrast, paragraph (A) does specifically mention numerous activities that occur on the surface of lands.

Therefore, we interpret the definition of surface coal mining operations at SMCRA section 701(28)(A) and in the analogous portion of the existing rules at 30 CFR 700.5, not to include subsidence, and to include only:

- (1) activities on the surface of lands in connection with a surface coal mine; and

(2) activities subject to section 516, conducted on the surface of lands in connection with surface operations and surface impacts incident to an underground coal mine, the products of which enter commerce or the operations of which directly or indirectly affect interstate commerce.

The second part of this definition, at SMCRA section 701(28)(B), supports our interpretation that paragraph (A) refers to "activities conducted on the surface of lands in connection with [1] a surface coal mine or. . . [2] "surface operations and surface impacts incident to an underground coal mine." Paragraph (B) refers to "the areas upon which such activities occur or where such activities disturb the natural land surface" and to holes or depressions "resulting from or incident to such activities. . ." (emphases added). The only "activities" to which paragraph (B) could refer are those described in paragraph (A), namely those conducted on the surface of lands. Thus, these surface activities define the applicability of paragraph (B) to underground mining.

We construe SMCRA section 701(28)(B) (and the rules at 30 CFR 700.5) to include only:

- (1) The areas upon which such surface activities occur;
- (2) The areas where such surface activities disturb the natural land surface; adjacent lands the use of which is incidental to such surface activities;
- (3) Lands affected by construction of new roads or improvement or use of existing roads to gain access to the site of such surface activities and for haulage; and
- (4) Areas on which are sited structures, facilities, or other property or materials on the surface resulting from or incident to such surface activities.

Paragraph (B) includes a lengthy list of specific surface features resulting from or incident to surface activities, which are included in this last category. Those surface features include excavations, workings, holes or depressions, repair areas, etc. All of these areas and features

included under paragraph B are referred to hereafter in this preamble as surface features affected by surface activities.

Surface activities in connection with surface operations incident to an underground coal mine, and surface activities in connection with surface impacts incident to an underground coal mine are included in the definition. Likewise, as provided in paragraph (B), surface features affected by such surface activities are included.

However, subsidence is not included within the term "surface coal mining operations" because it is not an activity conducted on the surface of lands, and it is not a surface feature affected by surface activities. In short, while subsidence is clearly a surface impact incident to underground mining, it is not included in the SMCRA definition of surface coal mining operations.

This reading of subsection 701(28) does not exempt subsidence from regulation under the Act, since Congress specifically provided for performance standards for subsidence under section 516, and subsequently section 720, of SMCRA. Most risks related to material damage caused by subsidence are addressed under the requirements of sections 516 and 720, such as the requirements for adopting measures consistent with known technology in order to prevent subsidence causing material damage, to the extent technologically and economically feasible, and maintaining the value and reasonably foreseeable use of surface lands, except in those instances where the mining technology used requires planned subsidence in a predictable and controlled manner. However, if an unforeseen subsidence danger arises, section 516(c) contains procedures to prohibit underground operations as necessary, providing a second level of protection for public health and safety. For example, section 516 requires:

(1) sealing of all shafts, entryways, and exploratory holes between the surface and underground mine working when no longer needed;

(2) elimination of fire hazards and any other conditions that constitute a hazard to health and safety of the public; and

(3) suspension of underground coal mining under urbanized areas, cities, towns, and communities if mining poses an imminent danger.

Thus, we believe Congress addressed in section 516 those subsidence control measures necessary to protect public health and safety and the public interest in subsidence protection. Therefore, prohibition of subsidence in all section 522(e) areas is unnecessary.

Our interpretation is consistent with SMCRA's explicit intent to "encourage the full utilization of coal resources through the development and application of underground extraction technologies," SMCRA section 102(k), 30 U.S.C. section 1202(k). Similarly, SMCRA states that:

. . . the overwhelming percentage of the Nation's coal reserves can only be extracted by underground mining methods, and it is, therefore, essential to the national interest to insure the existence of an expanding and economically healthy underground coal mining industry.

SMCRA section 101(b), 30 U.S.C section 1201(b).

These passages make clear that Congress intended to encourage and support an economically healthy and efficient underground coal mining industry. We believe that our interpretation best assures that these congressional intentions are met.

## 2. Legislative history

The legislative history on section 701(28) supports our interpretation, set out above, that the definition of surface coal mining operations includes only surface activities and, as set out in section 701(28)(B), surface features affected by surface activities. Our interpretation is consistent with the description of the effect of section 701(28) in the Senate Report on the adopted version:

"Surface [coal] mining operations"...includes all areas upon which occur surface mining activities and surface activities incident to underground mining. It also includes all roads, facilities, structures, property, and materials on the surface resulting from or incident to such activities

S. Rep. No. 128, 95th Cong. 1st Sess. 98 (1977) (emphasis added).

The Senate Report on the 1977 Senate bill discusses the significance of the definition in that Senate bill:

Surface mining operations is so defined to include not only traditionally regarded coal surface mining activities but also surface operations incident to coal underground mining, and exploration activities. The effect of this definition is that coal surface mining and surface impacts of underground coal mining are subject to regulation under the Act. . . .

S. Rep. No. 128, 95th Cong. 1st Sess. 98 (1977) (emphases added).

The references in the above paragraph to surface operations incident to underground mining and to surface impacts of underground mining, and the assertions that exploration activities are included in the definition (although coal exploration is specifically excluded from the Act s

definition) are inconsistent with the terms of the statute. Therefore, we conclude that the language of this passage is imprecise, and that it is not clear whether any weight should be attached to this discussion of the Senate bill (as opposed to the later Conference Committee Report's discussion of the Act).

Our interpretation that paragraph (A) of the definition of surface coal mining operations embodies only surface activities is consistent with the legislative history of section 522(e). This conclusion is supported by the discussion in the 1977 Senate report on section 522(e) which notes that "surface coal mining" is prohibited within the specified distances of public roads, occupied buildings, and active underground mines, for reasons of public health and safety." S. Rep. No. 128 at 55. Thus, one of Congress' purposes in sections 522(e)(4)-(5) was to protect public health and safety. However, prohibition of subsidence in section 522(e) areas would be unnecessary, since an underground mine must meet the requirements of sections 516 (and subsequently 720), and those requirements should prevent almost all risks to public health and safety. If an unforeseen subsidence danger were to arise, section 516(c) sets forth procedures to prohibit underground mining as Congress found necessary, providing a second level of protection for public health and safety. Therefore, we believe Congress sufficiently addressed in sections 516 (and 720) the measures necessary to address public health and safety from subsidence.

Congressional discussion of the prohibitions on mining in section 522(e) is devoid of any mention of subsidence or underground activities of coal mining. H. Rep. No. 218, 95th Cong. 1st Sess. 95 (1977); S. Rep. No. 128, 95th Cong. 1st Sess. 55 (1977). Instead, the legislative history of section 522(e) does mention terms that do not include any aspects of subsidence or underground operations, such as: strip mines, surface coal mines, and surface coal mining. See National

Wildlife Fed n v. Hodel, 839 F.2d 694 at 753-754 (D.C. Cir. 1988), interpreting surface coal mine and surface coal mine operation as not including underground mines for purposes of SMCRA section 717(b)).

The legislative history of SMCRA indicates that Congress was only concerned with subsidence insofar as it causes environmental or safety problems, disrupts land uses, or diminishes land values. Congress has repeatedly recognized that there is little concern about subsidence that causes no significant damage to a surface use or facility or danger to human life or safety. *See* H.R. Rep. No. 218, 95th Cong., 1st Sess. 126 (1977); H.R. Rep. No. 1445, 94th Cong., 2d Sess. 71-72 (1976); H.R. Rep. No. 896, 94th Cong., 2d Sess. 73-74 (1976); H.R. Rep. No. 45, 94th Cong. 1st Sess. 115-116 (1975); H.R. Rep. No. 1072, 93d Cong., 2d Sess. 108-109 (1974); H.R. Rep. No. 776, 102d Cong., 2d Sess. 102-474 (1992).

Analysis of the structure of Title V and the Act as a whole confirms that Congress set out related but separate regulatory schemes for surface and underground mining. Congress received ample testimony prior to the passage of the Act regarding the differences in both the nature and consequences of the two types of coal mining. The legislative history emphasizes that the differences in the nature and consequences of the two types of mining require significant differences in regulatory approach. For example, SMCRA section 516(a) requires that:

The Secretary shall promulgate rules and regulations directed toward the surface effects of underground coal mining operations. . . : Provided, however, That in adopting any rules and regulations the Secretary shall consider the distinct difference between surface coal mining and underground mining.

30 U.S.C. section 1266(a); *See* also SMCRA sections 516(b)(10) and (d), 30 U.S.C. §§ 1266(b)(10) and (d). *See, e.g.,* H.R. Rep. No. 218, 95th Cong., 1st Sess. 59 (1977); S. Rep. No. 128, 95th Cong., 2d Sess. 50 (1977); H.R. Rep. No. 1445, 94th Cong., 2d Sess. 19 (1976); S. Rep. No. 402, 93d Cong., 2d Sess. 83 (1973); H.R. Rep. No. 1072, 93d Cong. 2d Sess. 57, 108 (1974); H.R. Rep. No. 1462, 92d Cong., 2d Sess. 32 (1972); 123 Cong. Rec. 8083, 8154 (1977); 123 Cong. Rec. 7996 (1977); 123 Cong. Rec. 3726 (1977).

For instance, Congress was aware that environmental risks associated with underground mining are, for the most part, significantly different from those associated with surface mining.

Environmental impacts associated with (pre-SMCRA) unregulated or unreclaimed underground mines include subsidence and hydrological problems that are hidden deep underground and not observable at the surface for an unpredictably long time. Such surface consequences could be severe and long-lasting. The problems in some cases remain fundamentally inaccessible or unchangeable because of adverse technological, geological, and hydrological conditions. By contrast, most of the impacts of unregulated pre-SMCRA surface mining result from surface activities that are more immediate and more readily observable, and the resulting conditions are relatively accessible for reclamation. *See* H.R. Rep. No. 1445, 94th Cong., 2d Sess. 20-22 (1976).

It is reasonable to conclude that Congress addressed specifically, in section 516(c), the limited types of surface features that might be so significantly affected by subsidence from underground mining that subsidence should be precluded where appropriate. This interpretation that preclusion of subsidence is provided for solely under 516(c) is buttressed by the discussion in the 1977 House report that subsidence has no appreciable impact on agricultural land and similar types of land. H.R. Rep. No. 218, 95th Cong. 1st Sess. 126 (1977). We believe Congress did not intend to impose



the prohibitions of section 522(e) on subsidence, because those prohibitions would be unnecessary, since Congress had insured that the surface features that might need such protection are covered by section 516(c).

Further, the legislative history of SMCRA suggests that Congress may have wished to encourage longwall mining in particular:

Underground mining is to be conducted in such a way as to assure appropriate permanent support to prevent surface subsidence of land and the value and use of surface lands, except in those instances where the mining technology approved by the regulatory authority at the outset results in planned subsidence. Thus, operators may use underground mining techniques, such as long-wall mining, which completely extract the coal and which result in predictable and controllable subsidence.

S. Rep. No. 128, 95th Cong., 1st Sess. 84 (1977). *See also* S. Rep. No. 28, 94th Cong., 1st Sess. 215 (1975).

Congressman Udall, the bill's principal sponsor, also commented on this issue:

The House Bill contemplates rules to prevent subsidence to the extent technologically and economically feasible. The word prevent led to fears expressed by Secretary of the Interior Morton, that the effect would be to outlaw longwall mining, with its obvious subsidence. . . . In fact, the bill's sponsors consider longwall mining ecologically preferable and it and other methods of controlled subsidence are explicitly endorsed.

120 Cong. Rec. 22731 (1974).

Thus, our interpretation is consistent with Congress' intent to encourage planned, predictable, and controlled underground mining and full coal resource recovery. Because subsidence is likely

from room-and-pillar mining and is virtually inevitable with longwall mining, prohibiting subsidence below homes, roads, and other features specified in section 522(e) could make it substantially less feasible to mine. This would frustrate Congressional intent to encourage longwall mining, which provides planned, predictable, and controlled subsidence. Prohibiting subsidence would also substantially reduce the level of coal recovery in areas where the features specified in section 522(e) are common on the surface.

After examining the SMCRA legislative history, we believe that including subsidence in the definition of "surface coal mining operations" at section 701(28), and applying the section 522(e) prohibitions to subsidence would not accommodate Congress' intent to encourage underground mining and longwall mining in particular. Applying the prohibitions in section 522(e) to subsidence could substantially impede longwall and other full-extraction mining methods. As discussed above, SMCRA demonstrates that Congress intended to encourage underground mining and especially full-extraction methods such as longwall mining. Congress intended that longwall and other mining techniques that completely remove the coal be used as subsidence control measures. *See* H.R. Rep. No. 218, *supra*. These techniques involve planned subsidence.

The legislative history of section 516 contains ample references to Congress' focus on controlling rather than prohibiting subsidence. The following is pertinent House report language:

Surface subsidence has a different effect on different land uses. Generally, no appreciable impact is realized on agricultural land and similar types of land and productivity is not affected. On the other hand when subsidence occurs under developed land such as that in an urbanized area, substantial damage results to surface improvements be they private homes, commercial buildings or public roads and schools. One characteristic of subsidence which

disrupts surface land uses is its unpredictable occurrence in terms of both time and location. Subsidence occurs, seemingly on a random basis, at least up to 60 years after mining and even in those areas it is still occurring. It is the intent of this section to provide the Secretary with the authority to require the design and conduct of underground mining methods to control subsidence to the extent technologically and economically feasible in order to protect the value and use of surface lands.

H.R. Rep. No. 218, 95th Cong., 1st Sess. 126 (1977) (emphasis added). *See also* H.R. Rep. No. 1445, 94th Cong., 2d Sess. 71-72 (1976); H.R. Rep. No. 896, 94th Cong., 2d Sess. 73-74 (1976); H.R. Rep. No. 45, 94th Cong. 1st Sess. 115-116 (1975); H.R. Rep. No. 1072, 93d Cong., 2d Sess. 108-109 (1974).

In those extreme cases in which Congress felt that precluding subsidence could be necessary, it provided broad authority under section 516(c):

In order to prevent the creation of additional subsidence hazards from underground mining in developing areas, subsection (c) provides permissive authority to the regulatory agency to prohibit underground coal mining in urbanized areas, cities, towns and communities, and under or adjacent to industrial buildings, major impoundments or permanent streams.

S. Rep. No. 128 at 84-85.

In 1992, Congress enacted EPAct which amended SMCRA and added additional subsidence protection in a new SMCRA section 720, described above. 30 U.S.C. 1309(a), Energy Policy Act of 1992, section 2504, Pub. L. No. 102-486, 106 Stat. 3104. Although it is not germane to Congress intent in enacting SMCRA, because it does postdate SMCRA s enactment, the EPAct provides evidence of continuing congressional support for recovering coal resources through underground

mining techniques. Congress notes specifically that, Nothing in this section shall be construed to prohibit or interrupt underground coal mining operations. SMCRA section 720, 30 U.S.C. section 1309a.

We believe, based on its interpretation of the language of section 516 and of the legislative history, that Congress intended section 516(c), in combination with other provisions of SMCRA, to offer sufficient prevention and mitigation of damage to features vulnerable to significant impairment from subsidence. The existence of such a comprehensive subsidence regulatory scheme addressing subsidence makes it unlikely that Congress also intended to prohibit subsidence under section 522(e).

### **3. Policy considerations**

#### **a. This rule resolves questions about our interpretation of statutory provisions.**

This rulemaking establishes that subsidence is not a surface coal mining operation under SMCRA section 701(28), and therefore is not prohibited under SMCRA section 522(e). In the past, we have taken varying positions on section 522(e)'s applicability to subsidence. In some instances, our position could be interpreted to mean section 522(e) does apply to subsidence from underground mining. However, we believe that in the majority of cases, we have interpreted section 522(e) as not applying to subsidence.

In the 1979 rulemaking which first established permanent program rules under SMCRA, we addressed this issue in two provisions. We rejected a commenter's suggestion that the definition at 30 CFR 761.5 of surface operations and impacts incident to an underground coal mine should be limited to subsidence. We stated that the definition was intended to provide comprehensive

language that related to the definition of surface coal mining operations in section 701(28). We then went on to say that because the definition in section 701(28) (B) relates to disturbances of the natural land surface, and because SMCRA sections 516(b)(9) and (11) also relate to surface disturbances other than subsidence, the final definition should cover all surface disturbances. 44 FR 14990, Mar. 13, 1979. It appears that we were indicating that all surface disturbances, including subsidence, are covered under the definition in section 701(28) of surface coal mining operations and consequently are prohibited by section 522(e).

The preamble to the 1979 permanent program regulations also includes a discussion of 30 CFR 761.11(d), which concerns the SMCRA section 522(e)(4) prohibition on mining within 100 feet of the outside right-of-way of a public road. We accepted a comment that the 100 feet should be measured horizontally so that underground mining below a public road is not prohibited . We stated that mining under a road should not be prohibited where it would be safe to do so . 44 FR 14994, Mar. 13, 1979. One interpretation of this statement is that mining under a public road should be prohibited where it would be unsafe to do so. However, the preamble does not discuss whether the statutory authority for this prohibition would come from section 516 or from section 522(e).

Similarly, in a 1981 letter to the U.S. Forest Service concerning Otter Creek Coal Company v. United States, we stated that subsidence from mining activities under wilderness areas is acceptable as long as it does not significantly affect surface features. These effects can be predicted and mitigated if necessary . Letter of Patrick Boggs, Office of Surface Mining, to Ralph Albright, Jr., regarding Otter Creek Coal Company v. United States, at 2 (January 19, 1981). This document appears to conclude that only subsidence causing material damage is prohibited under section

522(e). However, in our later decision on the valid existing rights request of the Otter Creek Coal Company, we concluded that all subsidence from underground mining is a prohibited surface impact under section 522(e). 49 FR 31233, Aug. 3, 1984.

The Secretary took a different position in the supplemental M-Op filed with the District Court for the District of Columbia in 1985, in litigation challenging the validity of the 1983 rulemaking on VER. Federal Defendant's Supplemental Memorandum on the Relationship Between Section 522(e) and the Surface Impacts of Underground Coal Mining at 8, In re Permanent Surface Mining Regulation Litigation II, No. 79-1144 (D.D.C. 1985). In that case, the National Wildlife Federation (NWF), in its reply brief, raised for the first time the question of whether, in areas protected under sections 522(e)(4) and (5), all subsidence is prohibited. The supplemental memorandum stated that the Secretary had previously interpreted section 522(e)(5) as prohibiting subsidence causing material damage to protected features, and that 30 CFR 761.11 requires operators to prevent subsidence causing material damage within the areas protected under 522(e).

On several other matters, our actions are consistent with the position that subsidence is not a surface coal mining operation. In our most recent rulemaking defining permit area, we indicated that we do not consider subsidence to be a surface coal mining and reclamation operation. Our rules do not require including the area overlying underground workings (where subsidence may occur) within the definition of permit area. In the preamble, we explained that the permit area should only include the areas upon which surface coal mining and reclamation operations are conducted, not areas where potential subsidence may occur. 48 FR 14820 (Apr. 5, 1983). Thus, no permit is required for these areas where there are no surface activities.

In the absence of a Federal regulation specifically addressing this issue, we have accepted the policy of the majority of States with active underground coal mining operations, which do not currently apply the prohibitions of section 522(e) to subsidence impacts of underground coal mining. Rather, the States apply existing subsidence control requirements, which require the operator to identify and mitigate potential subsidence damage to structures and renewable resource lands. The States regulate subsidence effects on surface features in State counterparts to the Federal regulations implementing sections 516 and 720 of SMCRA.

We have also accepted the policy of other States to apply the prohibitions only to subsidence causing material damage. Only four States with underground coal reserves, Colorado, Illinois, Indiana, and Montana, arguably prohibit (or may prohibit) subsidence in 522(e) areas, in some way. *See* Final EIS, 1999, Table II-1 at pages II-2-3. Montana has no defined policy regarding the regulation of subsidence, due in part to the fact that the State has no active underground mine. Colorado prohibits material damage to any structures through State regulations under , in part, section 516 of SMCRA. In Illinois, under state property law, the mineral owner must possess the right to subside through applicable waiver or VER. Indiana prohibits material damage from subsidence to certain structures and lands, but has not developed specific policies related to the approval of planned subsidence. Our interpretation that section 522(e) prohibitions do not apply to subsidence is consistent with what most states are currently doing.

**b. This rule balances economic and environmental considerations.**

We believe this final rule best balances the competing environmental and economic considerations involved in this rulemaking. The language of SMCRA demonstrates that Congress

intended to encourage underground mining, especially full-extraction methods such as longwall mining. The statute and legislative history express Congress' intent to "encourage the full utilization of coal resources through the development and application of underground extraction technologies," SMCRA section 102(k), 30 U.S.C. 1202(k). Similarly, SMCRA states that, . . . the overwhelming percentage of the Nation's coal reserves can only be extracted by underground mining methods, and it is, therefore, essential to the national interest to insure the existence of an expanding and economically healthy underground coal mining industry. SMCRA section 101(b), 30 U.S.C section 1201(b). Congress intended that longwall and other mining techniques that completely remove the coal be used as subsidence control measures. *See* H.R. Rep. No 218, 95th Cong., 1st Sess. 126 (1977). However, applying the prohibitions of section 522(e) to subsidence could substantially impede longwall and other full-extraction mining methods. Clearly, if subsidence is likely to occur from room-and-pillar underground mining and is a virtually inevitable consequence of longwall mining , then prohibiting all subsidence below homes, roads, and other features specified in section 522(e) could make it substantially less feasible to mine and could substantially reduce coal recovery in areas where these features are common . We therefore believe that including subsidence in the definition of "surface coal mining operations" at section 701(28), and applying the section 522(e) prohibitions to subsidence, would fail to accommodate congressional recognition of the importance of underground mining and longwall mining in particular.

The viability of underground coal mining continues to be important to the nation s economy. The Nation s Demonstrated Reserve Base for underground mining (32.9 billion tons) is almost twice that for surface mineable reserves 16.7 billion tons. In almost one third of the coal producing states, underground reserves are 4 to 5 times greater than surface mineable reserves. *See*



Department of Energy, Energy Information Administration (DOE/EIA), U.S. Coal Reserves: A Review and Update , pp. 10-12, (Aug. 1996).

Overall, coal continues to be the principal energy source for electric power generation in the United States. The electric power industry is the dominant coal consumer with about 90 percent of U.S. coal consumption issued for electricity generation. (DOE/EIA, Annual Energy Outlook, pp. 3-5, 1998). Total U.S. energy consumption is projected to continue growing between 1996 and 2020, and electricity consumption is expected to parallel that growth by 1.4 percent per year through 2020. Forecasts predict both increased demand for electricity and decline in nuclear power. With lower coal prices, lower capital costs for coal-fired generating technologies, and higher electricity demand, coal-fired generation is projected to increase. However, the share of coal generation is expected to decline by 2020, because of anticipated restructuring of the electricity industry favoring less capital-intensive gas technologies for new capacity additions. Although coal-fired generation is anticipated to lose market share by 2020, it continues to account for more than one-half of electricity generation.

The continued rise in coal power generation accounts for the record high coal production in 1997. The electric power industry, the dominant coal consumer, used a record 922 million short tons in 1997, an estimated 2.8 percent increase over 1996, and record high production. The productivity gains that occurred in both underground and surface mines during the 1980's continued into the 1990's .

The three main underground mining methods used to extract coal are room-and-pillar, room-and-pillar with secondary mining, and longwall mining. Room-and-pillar is the predominant underground mining method in the United States, although longwall mining has increased in use

since 1960. And longwall mining continues to gain wide acceptance in the U.S. mining industry, having nearly doubled its share of total coal production since 1980.

### Room and pillar mining method

The room and pillar method consists of driving entries, rooms, and cross-cuts into the coal seam to extract coal. Pillars of coal are left to support the mine roof, or for haulage and ventilation. This is called "development" mining. Movements of the ground surface during development mining are nearly always imperceptible. During the development mining phase, 30 to 50 percent of the coal may be extracted from the panel. To prevent subsidence, the remainder of the coal may be left in a mine panel, to permanently support the overburden.

To increase coal extraction where conditions allow, development mining is followed by "pillar recovery," which is called secondary or retreat mining. During secondary mining, some or all of the coal pillars left to support the mine roof are extracted to obtain maximum recovery of the coal. As the pillars are extracted, controlled subsidence occurs, because the overburden sags into the mined-out area. Secondary mining can increase coal recovery to 85 percent.

### Longwall mining method

Longwall mining is a high-extraction mining method that maximizes coal recovery. Developing longwall mine main airways and sub-mains (underground ventilation channels needed for access and ventilation of the longwall panels) is essentially identical to developing room and pillar mining. However, longwall mining differs from room-and-pillar mining in that the panel is fully extracted by an automated shearer or plow. A longwall mining operation can extract as much

as 90 percent of the coal in each panel. Retreat mining of a longwall panel can extract 100 percent of the coal.

The longwall mining method works as follows:

1. Groups of three or four parallel entries are driven perpendicular to the main entry on either side of the proposed panel. The width of the panel varies from 500 to 1,200 feet, and the length of a panel varies from 4,000 to 15,000 feet.

2. Longwall mining removes the coal in one operation from a long working face or wall that advances, or retreats, in a continuous line. The coal is cut by a shearer or coal plough which travels up and down along the face and makes cuts from 27 to 39 inches deep. The broken coal falls on to an armored flexible conveyor (AFC) which transfers the coal to the stage loader.

3. The coal is then conveyed to the surface through several belt conveyors. Mechanical steel supports known as shields or chocks are used to support the mine roof along the entire longwall face.

4. After each cutting cycle of the shearer/plough, the steel supports and AFC are hydraulically advanced. The mine roof immediately behind the AFC is allowed to cave. The space from which the coal has been removed is either allowed to collapse or is completely or partially filled with stone and debris. The roof rock that falls into the mined out area is referred to as the "gob."

5. As the overburden continues to collapse, effects of subsidence progress upwards toward the surface. However, some solid coal barriers and pillars are left in the mine for haulage, ventilation, and other purposes. Ninety percent of the surface subsidence caused by longwall mining occurs within 4 to 6 weeks of mining.

In the past two decades, the longwall mining method has become the safest, most productive and most economic underground mining method. We expect longwall mining to continue to be an important and expanding type of mining. In 1993, longwall mining accounted for 38 percent of the coal extracted by underground mining methods. The Economic Analysis estimates that longwall mining will account for 48 percent of production by 2015. Final EA, 1999.

Longwall mining requires only approximately one-third of the personnel required by room-and-pillar mining at the face. The high capital costs of longwall mining are generally offset by lower operating costs due primarily to higher productivity. The average operating costs for a coal mine operation include the operating cost per ton and the return on the capital cost allocated per ton. The operating costs for longwall mining range from \$0.50 to \$2.00 per ton, while operating costs for room-and-pillar range from \$2.00 to \$7.00 per ton. Room-and-pillar mining operating costs average \$3.25 per ton more than longwall mining. The difference in costs is attributable to higher labor and material costs for room-and-pillar mining, and to economies of scale for longwall mining.

#### Effects on the coal mining industry and on the economy if 522(e) prohibitions were applied to subsidence

Under SMCRA, when coal is mined, the mine operator must meet all existing subsidence control requirements, as outlined above. If section 522(e) were deemed to apply to subsidence from underground mining, the operator could not mine in any part of the underground workings where mining would cause subsidence affecting a protected surface feature. The surface area affected by subsidence is usually considerably larger than the area actually mined underground. Because subsidence typically occurs in a funnel shape radiating upward and outward from the underground

mine cave-in, any surface impacts may extend well beyond the area directly above the mine. Thus, to ensure that subsidence would not take place within a surface area specified in section 522(e), underground mine operations would be required to leave coal in place around each protected feature for a horizontal distance much larger than the protected area. In many cases, the amount of coal left in place to support dwellings would result in a pattern of irregular mined areas that would eliminate the contiguous coal reserves needed to make longwall operations economical. Consequently, few new longwall mines would be opened. In the Economic Analysis, we estimate that blocking longwall production would increase coal-mining and coal-delivery costs and would shift production patterns. The additional coal-mining and coal-delivery costs to the economy would be approximately \$2.65 billion (discounted) over a 20-year period. Final EA, 1999.

However, if the section 522(e) prohibitions were applied to subsidence, subsidence could be allowed nonetheless on some lands protected by 522(e)(2), (3), and (4), and some (e)(5) areas. Before this could happen, an operator would have to get a waiver or approval for subsidence on the protected lands. The area for which an operator would have to obtain a waiver would include the area directly under the protected feature, and the area within any specified buffer zone around the protected feature (either 300 feet or 100 feet). In the absence of that waiver, the operator would have to leave the coal in those areas, and in an additional buffer area based on the predicted angle of draw and the depth of the coal seam. Because of the potentially large amount of coal that would have to be left in the ground in the absence of a waiver, we estimated that if 10 percent or more of homeowners withheld waivers, a longwall mining operation would not be economically viable. See Final EIS, 1999; Final EA, 1999.

In summary:

1. Longwall mining is an important and expanding type of mining. It accounted for 38 percent of the underground mining in 1993, and is forecast to increase its share to 48 percent by 2015.
2. Longwall mining is a low-cost underground mining method, and in some instances, may be the only economically feasible underground mining method when the coal seam is deep or the roof is extremely fragile.
3. The key to the competitive advantage of longwall mining is access to large blocks of uninterrupted coal.
4. If the prohibitions of 522(e) were to apply to subsidence, longwall mining would no longer be economically feasible if as few as 10 percent of the owners of occupied dwellings denied waivers for mining.

A more detailed discussion of the impacts is provided in the Final EA, 1999.

#### Alternatives considered.

We also evaluated potential environmental impacts of identified rulemaking alternatives concerning the applicability of section 522(e) prohibitions to subsidence. In the EIS prepared for the rulemaking, we concluded that subsidence-related impacts to section 522(e) lands have occurred in the past and are likely to continue to occur irrespective of whether or not the prohibitions apply. This conclusion was based on information showing that subsidence on National Forest lands, historic sites listed on the National Register of Historic Places, and roads is typically allowed through either compatibility findings or waivers granted by surface owners and land managers.

The EIS concludes that the interpretation in the final rulemaking would have the greatest level of environmental impact and afford the lowest level of protection to the areas listed in section 522(e)(1). However, for the reasons stated in the EIS, we predict relatively limited potential impacts over a 20-year period from the final rulemaking. On lands protected by section 522(e)(1), totaling nearly 200 million acres, approximately 5.2 million acres are underlain by coal, but only about 175,000 acres are underground mineable. Under the final rule, less than 2 percent (approximately 3,500 acres) of section 522(e)(1) lands is predicted to be underground mined over the next 20 years. Those areas most likely to be impacted are lands within the National Parks System and National Recreation Areas.

The EIS identified approximately 12,600 acres of State park lands that could be affected by subsidence-related impacts over the next 20 years if the prohibitions of section 522(e) do not apply to subsidence. However, the EIS predicted that impacts to State and local parks could be reduced by as much as 45 percent under the good faith all permits VER definition. This reduction could be caused if mineral owners are unable to demonstrate VER needed for surface support facilities such as roads, ventilation, and face-up areas for access to underground coal within the protected area.

The greatest level of impact is predicted for occupied dwellings in section 522(e)(5) areas. The EIS estimated that approximately 29,600 would be affected over a 20-year period under the interpretation that section 522(e) prohibitions do not apply to subsidence. These impacts generally would span an extended period of time, and could result in reduced property value, loss of income, and disruption to many aspects of daily life. Homeowners could suffer financial burdens from the repair of damaged land and structures. And while these impacts represent a significant amount of disruption to the dwelling owners, they are mitigated through the performance standards for

underground coal mining. Those standards require that underground mining operations repair adversely affected dwellings, or compensate for diminution in value.

However, in evaluating these predicted environmental impacts, we noted that they are virtually identical to the impacts of taking no final rulemaking action, because the final rule is virtually the same as maintaining the status quo-- the No Action Alternative. Final EIS, 1999.

**c. This rule avoids a regulatory gap.**

As noted above, we have concluded that no regulatory gap occurs as a result of section 522(e) not applying to subsidence. This is so because sections 516 and 720 and related SMCRA provisions provide ample authority to regulate surface effects of underground mining under existing regulations. The detailed description of the existing relevant regulations in part I demonstrates that our regulations implementing sections 516 and 720 provide broad subsidence protection, and that a prohibition of subsidence within the buffer zones around dwellings, roads, and other surface features listed in section 522(e) would be superfluous, and that no regulatory gap results from our interpretation. And, if there are any environmental values or public interests that warrant additional protection beyond what is currently provided, we have full authority under sections 516 and 720 and other SMCRA provisions, to develop additional regulations to protect such values or interests, without the disruption in the longwall mining industry that would result from applying section 522 (e) prohibitions to subsidence.



**d. This rule balances the interests of surface owners and industry.**

Our interpretation recognizes that in most cases, the mineral owner purchased the property right to undermine and probably to subside, upon acquiring the mineral rights. This property right has already been made subject to regulatory requirements under SMCRA that protect the surface owner's interests to the extent Congress has established specific requirements. Thus, our interpretation best balances both the surface and owner's interests, because it ensures that the surface owner's property rights are protected, and allows the mineral owner to use its mineral rights consistent with existing SMCRA subsidence control requirements. And most importantly, we believe that the public interest in protecting 522(e) surface features from subsidence damage will be fully protected by SMCRA's subsidence control requirements.

**e. This rule maintains stability in SMCRA implementation.**

We believe that the final rule will cause minimal disruption to existing State regulatory programs and expectations associated with them. Those programs reflect existing SMCRA regulatory provisions. We believe the existing provisions adequately protect 522(e) features and therefore do not require change. Because this rule reflects current and longstanding practice and policy in state administration of regulatory programs, it avoids unnecessary change in state administration of regulatory programs.

Equally as important, the final rule enables the states to retain flexibility in regulating coal mining operations and protecting the environment. A goal of the SMCRA regulatory system is to create and maintain an effective balance between state and federal government. SMCRA sections 101(e), (g), and (k). To achieve this balance, Congress established state primacy under SMCRA.

See SMCRA sections 101(f), 102(g). State primacy allows States to develop and implement regulatory programs that meet SMCRA requirements and also address the specific conditions and concerns of individual states. This allows states to address differences in terrain, geology, and other conditions when regulating subsidence.

Applying the section 522(e) prohibition to subsidence could require a major overhaul of State regulatory programs without a commensurate benefit to the citizens, the environment, the economy, or the State. We believe that existing subsidence controls under State and Federal programs properly implement SMCRA. Without a clearly demonstrated need, a requirement to impose new administrative burdens and costs would waste State and Federal resources.

**f. This rule promotes safety.**

Although capital-intensive, longwall mining has become the safest and most productive and economic underground mining method. The result of this mining technique is almost immediate subsidence that is highly predictable as to how much surface lands will subside. Hydraulic shields provide for temporary support for the miners and equipment at the longwall face, and as the mining progresses along the longwall face, the roof in the mined-out section collapses. The roof collapse progresses to the surface via fracturing and/or the flexing of strata, and manifests itself as surface subsidence.

Almost all surface displacement occurs within days of the underlying roof failure. The amount of surface displacement is fairly predictable and depends upon the thickness of the coal seam and the makeup and arrangement of the overlying strata. Since the amount and timing of the subsidence is both highly predictable and controlled it is referred to as "planned subsidence. However, this

planned subsidence can cause damage to surface structures, since no supporting coal pillars are left within the mine to support the surface. And, while the probability of subsidence from longwall mining is relatively predictable, the nature and extent of subsidence damage to surface features and water resources is less predictable. However, because the subsidence occurs within a relatively short period, usually during the permit period, it is usually easier to verify the cause and to ensure mitigation or compensation for any structural damage and replacement of water supply.

In terms of worker safety, the longwall system also offers a number of advantages over room-and-pillar mining:

1. It concentrates miners and equipment in fewer working sections, making the mine easier to manage;
2. It improves safety through better roof control and reduction in the use of moving equipment;
3. It eliminates roof bolting at the working face to support the mine roof, and it minimizes the need for dusting mine passages with inert material to prevent coal dust explosions;
4. It involves no blasting and attendant dangers;
5. It also recovers more coal from deeper coalbeds than does room-and-pillar mining;
6. The coal haulage system is simpler, ventilation is better controlled, and subsidence of the surface is more predictable; and
7. It offers the best opportunity for automation.

Thus, if longwall mining is not precluded, it will continue to provide greater safety and faster, more controlled, and more quickly mitigated subsidence damage. As discussed above and in the EIS and EA, prohibiting subsidence in 522(e) areas could make longwall mining infeasible in substantial parts of the coal fields, and thus could preclude the safest, most economical and

productive and most readily mitigated method of underground mining. *See* Final EIS , 1999; Final EA , 1999.

**g. This rule acknowledges existing property rights.**

The final rule recognizes existing property rights and avoids certain potential compensable takings of property interests. In most cases of severed coal rights, the severance also conveys the property right to undermine the surface, and may include the right to subside; and any such rights would still limit or burden the surface property rights. *See, e.g.* R. Roth, J. Randolph, C. Zipper, *Coal Mining Subsidence Regulation in Six Appalachian States*, 10 Va. Env'tl. L.J. 311 (1991); C. Fox, Jr., *Private Mining Law in the 1980's*, 92 W.Va. L. Rev. 795 (1990); T. Gresham, M. Jamison, *Do Waivers of Support and Damage Authorize Full Extraction Mining*, 92 W.Va. L. Rev. 911 (1990). We believe failure to allow exercise of these conveyed rights would be inequitable and could risk compensable takings. The final rule allows the holder of such mining and subsidence rights to continue to exercise them, subject to existing SMCRA regulation.

**III. Response to Comments**

Several commenters dispute the need for any rulemaking, arguing that our longstanding interpretation provides an efficient system consistent with the intent of SMCRA. However, several commenters disagree, expressing general support for the clarity and additional specificity that the rule provides. We believe that the clarity, specificity, and relative stability provided by a rulemaking support adoption of a final rule. Furthermore, as noted above the district court has ordered the Secretary to do a rulemaking on the applicability of section 522(e) to subsidence in

accordance with the notice and comment procedures outlined in the Administrative Procedure Act. 5 U.S.C., section 551 et seq. National Wildlife Federation v. Babbitt, 835 F. Supp. 654 (D.D.C. September 21, 1993).

Many of the comments from private citizens expressed general opposition to the proposed rule and argued that mining should be prohibited entirely in the 522(e) areas. Similarly, some commenters argued that the question should not be framed in terms of whether protection against subsidence is required or not, but rather should address protection of the use of surface lands from all adverse effects of underground mining. Commenters noted that subsidence has both direct and indirect effects. Thus, uneven settlement from mining can cause dewatering of aquifers and other indirect effects on land stability, even though it may not directly impair use of the land surface through surface slumping and other surface land deformation. Additionally, when underground works intercept bedding planes and fracture zones, they can cause dewatering without subsidence. Commenters asserted that properly applying section 522 would require that underground mining be prohibited where any surface impacts (direct or indirect) could result from the underground mining activity.

SMCRA prohibits surface coal mining operations in section 522(e) areas, but also specifies exceptions to those prohibitions. Therefore, the proposed rule did not include absolute prohibition as an option, and we are not adopting such a prohibition. Further, SMCRA does not prohibit underground mining per se in section 522(e) areas, or all surface impacts of underground mining, and for the reasons given above we are not adopting such a prohibition.

### **A. SMCRA definition of surface coal mining operations**

Some commenters support our interpretation that the definition of surface coal mining operations embodies only surface activities. Those commenters note that our interpretation is consistent with the description of the effect of section 701(28) in the Senate Report on the version of the definition that was adopted:

"Surface [coal] mining operations"... includes all areas upon which occur surface mining activities and surface activities incident to underground mining. It also includes all roads, facilities, structures, property, and materials on the surface resulting from or incident to such activities

S. Rep. No. 128, 95th Cong. 1st Sess. 98 (1977) (emphasis added).

These commenters agree with us that the legislative history of section 701 can reasonably be read to support the interpretation that the definition of surface coal mining operations embodies only surface activities. Commenters refer to the discussion in the 1977 House Report of the definition of surface coal mining operations :

- (A) Activities conducted on the surface of lands in connection with a surface coal mine or surface operations and surface impacts incident to an underground coal mine...

H.R. Rep. No. 218 at 43.

Commenters also agree that paragraph (B) of section 701(28) supports our interpretation. While paragraph (A) applies to "activities conducted on the surface of lands in connection with a surface coal mine or. . ." "surface operations and surface impacts incident to an underground coal

mine . . .," paragraph (B) applies to "the areas upon which such activities occur or where such activities disturb the natural land surface" and to holes or depressions "resulting from or incident to such activities. . ." (emphases added). The commenters agree that the only "activities" to which paragraph (B) could refer are those described in paragraph (A), namely those conducted on the surface of lands in connection with a surface coal mine or in connection with the surface operations and impacts incident to an underground coal mine. Thus, commenters agree that, if our reading of paragraph (A) were not adopted, paragraph (B) would not apply to any aspects of underground mining-- an untenable result.

Commenters affirm that our reading of subsection 701(28) would not mean that subsidence would be exempt from regulation under the Act, since Congress specifically provided for regulation of subsidence under section 516 of SMCRA.

In contrast, other commenters argue that the plain meaning of the Act establishes that subsidence is included in the definition of surface coal mining operations and is therefore prohibited in section 522(e) areas. These commenters assert that the language of section 701(28)(A) encompasses two elements:

- (1) activities conducted on the surface of lands in connection with a surface coal mine; and
- (2) surface operations and surface impacts incident to an underground mine.

These commenters argue that, in addition to activities and operations incident to underground mining, impacts incident to underground mining also clearly constitute surface coal mining operations . Commenters assert that the D.C. Circuit stated that

The most natural reading of the statute as a whole, and the definition in section 701(28) in particular,. . . suggests that surface coal mining operations encompasses both surface coal

mines and the surface impacts [sic. The decision said effects. ] of underground coal mines. National Wildlife Fed n v. Hodel, 839 F.2d 694, 753 (D.C. Cir. 1988).

We do not agree with commenter s interpretation of the significance of this passage in the court s 1988 decision. The issue before the court was whether the requirement of SMCRA section 717(b), for replacement of water supplies by the operator of a surface coal mine, also requires water supply replacement by underground mine operators. Thus, the interpretation of section 701(28) as it applies to 522(e) was not before the court, and the passage quoted by the commenters is dictum.

Commenters also assert that, applying the definition of surface mining contained in the Act, i.e., surface impacts incident to an underground mine , the Sixth Circuit concluded that under section 522(e), no coal mining which disturbs the surface shall be permitted...on any federal lands within the boundaries of any national forest . Ramex Mining Corp. v. Watt, 753 F.2d 521, 522, and 523 (6th Cir. 1985) quoting sections 701(28) and 522(e).

We conclude that the quoted language from the Ramex decision is best read as dictum, since the issue before the court was not the interpretation of section 701(28), but rather whether national forest lands on which a mineral holder proposed to mine severed coal rights, were federal lands for purposes of SMCRA section 522(e)(2). We note in passing that the court used a different term ( surface mining ) than the term used in section 701(28) ( surface coal mining operations ) and that the two terms are not properly interchangeable. We also note that the court did not quote and may not have considered the full and correct language of the definition of surface coal mining operations , at section 701(28).



We considered these comments and the quoted comments of the courts. We believe these interpretations would require an alternative parsing of the definition of surface coal mining operations in section 701(28) in which the phrase surface impacts incident to an underground coal mine would be read as independent of the words activities conducted on the surface of the lands. Therefore, for the reasons set out below, we do not agree with these interpretations.

There are at least three problems with this parsing of section 701(28)(A). First, it would render the phrase "on the surface of lands" superfluous, since all "[activities conducted . . . in connection with a surface coal mine" necessarily occur on the surface of lands. The phrase has meaning only if it also modifies "[activities conducted . . . in connection with . . . an underground coal mine.

Second, the remainder of paragraph (A) and all of paragraph (B) of this definition would not apply to underground coal mines, since those provisions refer back to the surface activities covered in the first portion of paragraph (A). We do not believe Congress could have intended such a result.

Third, this construction would require the reader to conclude that the phrase "in connection with" was not intended to apply to surface operations and surface impacts incident to an underground coal mine. This result would conflict with our position since the inception of the program that the term "surface coal mining operations" includes surface facilities operated in connection with an underground coal mine. The latter is a position which we regard as consistent with the Act and with legislative intent, and which we reaffirmed in a rulemaking concerning surface facilities in connection with an underground coal mine. 53 FR 47384 (Nov. 22, 1988). Consequently, we believe the alternative parsing is not a sound interpretation of the definition. Since these problems with the alternative parsing were not considered by the court in the quoted 1988 decision. We believe the courts did not have the opportunity to address these problems, and

we expect that court would not have applied the quoted rationale if the court had considered these matters.

Commenters claim the 1991 Solicitor's opinion offered contradictory rationales for the conclusion that subsidence from underground mining is properly regulated solely under SMCRA section 516 and not under section 522(e). In their opinion, the Solicitor states that the statutory definition of surface coal mining operations is, on the one hand, clear on its face and excludes subsidence and, on the other hand, ambiguous enough to allow the Secretary [sic] discretion to exempt subsidence from its scope. (*citing* the M-Op at 2, 13 [100 I.D. 85 at 87, 93, and 99-100]). We do not agree that the M-Op contains contradictory statements. Rather the M-Op concludes that Congress has spoken to the issue, and gives the best reading of the statutory language. The M-Op then indicates that, even if this reading were not required by the terms of the statute and the legislative history, we would have ample authority to adopt the interpretation. The M-Op also notes that, to the extent there is confusion as to the meaning of the term surface coal mining operations, an agency's interpretation of a statute it administers is entitled to great deference. *Id.*

Our proposed rule would interpret 701(28) to include activities conducted on the surface of lands . . . in connection with . . . surface operations and surface impacts incident to an underground mine. Commenters refer to the M-Op and argue that if the Secretary's [sic] juxtaposition were accepted, it would lead to the absurd conclusion that causing subsidence in section 522(e) areas is permissible (because it does not involve activities on the surface) but that correcting subsidence is prohibited (because reclamation activities would constitute activities conducted on the surface of lands in connection with . . . surface impacts incident to an underground coal mine ).

By contrast, several commenters agree with our position that the reclamation of off-permit subsidence does not require a permit. In a 1983 rulemaking, we established that the permit area for an underground coal mine does not include the area overlying underground mining where subsidence may occur. 48 FR 14820 (Apr. 5, 1983). Areas overlying underground mining are included in the definition of adjacent area. SMCRA section 510(b)(4) requires a determination that the areas proposed to be mined are not included within an area designated unsuitable for surface coal mining pursuant to section 522 of the Act... . This statutory provision is implementing the requirement for a permit finding in section 773.15(c)(3). Some commenters further point out that the mere potential for subsidence is not a surface coal mining operation with attendant reclamation obligation. (*citing* Government Brief before the U.S. District Court in National Wildlife Fed n v. Hodel at 99-109). (839 F. 2d 694 (D.C. Cir. 1988)). These commenters note that if subsidence impacts occur, the regulations impose a reclamation responsibility upon an operator even if such impacts are outside the permit area. The commenters also note that whether the impacts are inside or outside the permit area, the performance standards of 30 CFR Part 817 provide applicable reclamation requirements. However, for other offsite impacts regulated under SMCRA, the commenters observe that no permit is required to conduct reclamation. These commenters add that throughout the years of program implementation, the Department's position has been clear and consistent: the area overlying underground workings does not need to be included in the permit area for a mine and is not subject to section 522(e).

We agree. We believe our interpretation is consistent with the 1983 rulemaking in which we defined adjacent area as the area outside the permit area where a resource or resources... are or reasonably could be expected to be adversely impacted by proposed mining operations, including

probable impacts from underground workings. 30 CFR 701.5 We stated in the April 5, 1983, rulemaking that the requirements of section 522(e) do not apply to adjacent areas . . . , i.e., potential off-site impacts. 48 FR 14816, Apr. 5, 1983. In that rulemaking, we defined adjacent area as the area outside the permit area where a resource or resources . . . are or reasonably could be expected to be adversely impacted by proposed mining operations, including probable impacts from underground workings. 30 CFR 701.5 Thus, since 1983, our interpretation has been that areas where subsidence may occur are not required to be included in the permit area, and that section 522(e) does not apply to the adjacent areas (where subsidence may occur).

One commenter alleges that the proposed rule assumes that underground mining could be authorized within a section 522(e) area merely through a redefinition of surface impacts as it relates to subsidence. This commenter also alleges that this assumption fails to account for the other surface impacts intended to be avoid[ed] in section 522(e) areas: dewatering of aquifers, alteration of the prevailing hydrologic balance of the area, placement of mine support structures, entryways, ventilation shafts, and access or haulage roads. The commenter mischaracterizes our position. We agree that some of the things listed by the commenter would be surface impacts. Other things listed, including placement, construction, maintenance, or use of structures or features on the surface, would be surface activities and the areas affected by them, and thus would be included in the definition of surface coal mining operations.

Commenters assert that the Secretary's reading is contrived and also fails to give effect to the portion of section 701(28)(A) that cross-references section 516. The commenters also assert that the Secretary concedes the subject to language is merely a cross-reference indicating which activities conducted on the surface in connection with an underground coal mine are surface coal mining

operations, namely, those that are subject to regulation under section 516 SMCRA . Commenters argue that subsidence is equally subject to regulation under section 516, and therefore, under the Secretary s own theory, must be included within the scope of section 701(28)(A). They further suggest that the Secretary s [sic] reading is contrary to the plain meaning of section 701(28)(A), and rests on a contorted and nonsensical reading of the statutory language. We are not persuaded by commenters assertions. We believe that our interpretation outlined above is reasonable, and that only surface activities are properly included under section 701(28)(A). For the reasons set out in the rationale section , we have concluded subsidence is not included in paragraph (A) of the definition because it is not an activity conducted on the surface of the land. This interpretation is consistent with the fact that there is no mention in paragraph (A) of subsidence, underground activities, or surface impacts of underground activities, which might clearly establish that section 701(28) did include subsidence. By contrast, paragraph (A) does specifically mention numerous activities that occur on the surface of lands.

Commenters allege that even if section 701(28)(A) were limited to surface activities, subsidence in section 522(e) areas would still be prohibited by section 701(28)(B) because the paragraph expressly states that holes or depressions. . . resulting from or incident to such activities constitute surface coal mining operations." They further point out that the in the 1998 Draft Environmental Impact Statement the Secretary [sic] concedes that subsidence constitutes holes or depressions:

Two types of topographic features caused by mine subsidence are sinkholes and troughs. A sinkhole is a circular depression in the ground surface that occurs when the overburden collapses into a typically shallow mine void. A trough is a depression in the ground surface,

often rectangular in shape with rounded corners, that is formed by sagging of the overburden into a mined-out area.

We agree that subsidence may include holes or depressions. However, for the reasons explained above, our position is that only surface features affected by surface activities would be surface coal mining operations under section 701(28)(B).

Commenters argue that subsidence not only constitutes holes or depressions; it also is resulting from or incident to such activities within the meaning of the last phrase of section 701(28)(B). In their opinion, the initial excavation on the earth's surface through which miners and material are conveyed underground would constitute activities within the Secretary's reading of section 701(28)(A). We agree that the process of surface excavation would be a surface activity. However, commenters go on to incorrectly assert that any subsidence that occurs is necessarily resulting from or incident to these surface activities. Commenters believe that subsidence is functionally related to these surface activities and could not occur without them, i.e. subsidence is linked to these surface activities in a but-for chain of causation. Commenters refer to NWF v. Hodel, 839 F.2d at 742-45 (affirming DOI rule that applied the resulting from or incident to test to include even processing and support facilities that are entirely off-site). We do not agree with this assertion. Subsidence results from underground activities, not surface activities. If there were no underground activities, there would be no subsidence from underground mining.

Commenters charge that the applicability of section 522(e) to subsidence is confirmed by subsection 522(e)(2)(A) which prohibits surface coal mining operations within national forests, but allows a limited exception where surface operations and impacts are incidental to an underground coal mine. Commenters argue that, if impacts were generally outside the scope of

section 522(e), such an exemption would not have been necessary. We do not agree. We interpret the referenced language in 522(e)(2)(A) to refer to surface operations and impacts from underground mining which are included in the definition of surface coal mining operations at SMCRA section 701(28)(B) under our interpretation.

Commenters allege that the term activities, which the Secretary considers to be the operative term for the entire definition of surface coal mining operations, is conspicuous by its absence from section 522(e)(2)(A). They suggest that if Congress had really intended the tangled parsing of section 701(28)(A) proposed by the Secretary, it would have drafted section 522(e)(2)(a) to apply where activities on the surface of lands are incident to an underground coal mine. In their opinion, Congress did not do so, however, and they recommend that the Secretary respect Congress decision to address impacts.

We disagree with the commenters characterization. Congress defined what surface coal mining operations means in section 701(28), and then used that term in section 522(e). The definition at 701(28) refers to surface activities, and then refers repeatedly in 701(28) to such activities; but activities are not the only thing included in the definition. Section 701(28) also specifies certain surface features affected by surface activities. Section 701(28) includes all of the listed categories of surface activities and surface features. Thus, neither section 701(28) nor section 522(e) refers only to surface activities. We are not required to speculate about other ways Congress might have drafted this provision, if we have provided a reasonable interpretation of what Congress actually did say. For the reasons set out in this preamble, we believe our interpretation is reasonable.

Commenters suggest that the Secretary [sic] acknowledged the import of section 522(e)(2) in his discussion of the 1979 rulemaking:

Concerning the definitions at 30 CFR. section 761.5, we rejected a comment that surface operations and impacts incident to an underground mine should be limited to subsidence. 44 FR 14990 (Mar. 13, 1979). The negative implication would appear to be that such operations and impacts (including subsidence) are otherwise prohibited by section 522(e). (*citing* the M-Op at 11 n. 17 [100 I.D. 85 at 92, fn. 17]).

The commenters further assert that the Secretary [sic] failed to offer any justification for ignoring this negative implication. This comment refers to a passage in the Solicitor's M-Op. In that passage, the Solicitor did not ignore the implication but rather recognized it as one of numerous arguably inconsistent actions by OSM over the history of implementing 522(e). Similarly, in the proposed rule, we did not ignore the negative implication, but rather considered it as well as all other relevant factors. This rulemaking is the first time we specifically address the issue with this level of detailed analysis. And in this final rule, for the reasons stated above in the rationale section, we are not adopting the interpretation urged by these commenters.

Commenters claim that the 1979 rulemaking explicitly defines the section 522(e)(2)(A) phrase surface operations and impacts incident to an underground coal mine to include activities that are not conducted on the surface of the lands:

[A]ll activities involved in or related to underground coal mining which are either conducted on the surface of the land, produce changes in the land surface or disturb the surface, air or water resources of the area, including all activities listed in section 701(28) of the Act and the definition of surface coal mining operations appearing in section 700.5 of this chapter.



30 CFR. 761.5.

Commenters urge that because subsidence both produce[s] changes in the land surface and disturb[s] the surface, air, and water resources, it is included within the second and third disjunctive clauses of the definition. We agree that subsidence is a surface impact incident to an underground coal mine. However, for the reasons outlined above in section II. B., we do not agree that subsidence is a surface coal mining operation subject to the prohibitions of section 522(e). That is, we interpret section 701(28)(A) to apply only to surface activities of the types listed in that section (and not to surface operations and impacts per se); and we interpret section 701(28)(B) to apply only to the areas and features listed; and therefore section 701(28) does not include subsidence.

Other commenters agree with us, and argued that attempting to glean the term subsidence from the language of subsection (B) is unavailing. The two words holes or depressions, for instance, do not constitute Congress vernacular for subsidence. We disagree in part with this comment. Subsidence may result in a hole or depression, but subsidence would be included under section 701(28) only if it is a surface feature affected by surface activities, as provided in section 701(28)(B).

## **B. Congressional intent**

As discussed below, various commenters point to language in the Congressional reports that appears to be imprecise and inconsistent with other report language and with the terms of the statute. We believe that in any case, the language of the Act prevails.

A group of commenters allege that the legislative history of SMCRA establishes that Congress intended that subsidence due to underground mining be considered a surface coal mining operation, and that subsidence therefore is prohibited in areas protected under SMCRA section 522(e). These commenters argue that committee reports from both houses of Congress compel a conclusion that subsidence constitutes surface coal mining operations and is therefore subject to section 522(e). Commenters note that the Senate Report includes a statement that the hazards from the surface effects of underground coal mining include the dumping of coal waste piles, subsidence and mine fires. The commenters refer to three statements in the Senate Report on SMCRA, to support their claim:

(1) The Act was addressed to surface coal mining operations--including exploration activities and the surface effects of underground mining.

(2) Initial regulatory requirements extend to [a]ll surface coal mining operations, which include, by definition surface impacts incident to underground coal mines

(3) The Senate Report characterizes Surface coal mining operations as including not only traditionally regarded coal surface mining activities but also surface operations incident to underground coal mining, and exploration activities. The effect of this definition is that coal surface mining and surface impacts of underground coal mining are subject to regulation under the Act.

S. Rep. No. 128, 95th Cong., 1st Sess. 49, 50, 71, 98 (1977).

We have considered the materials cited by the commenters. We are not persuaded by the commenters arguments and interpretations. We agree that Congress considered subsidence to be a surface impact and a surface effect incident to underground mining. However, for the reasons given

above, we do not agree that Congress intended to include subsidence in the definition of a surface coal mining operation. We recognize that the Act addresses subsidence as a surface effect of underground mining, but we believe the Act addressed those effects in sections 516, and subsequently 720, and not as surface coal mining operations under sections 701(28) and 522(e).

Regarding the first quoted passage from the 1977 Senate Report, we believe the report's statement that coal exploration is included in surface coal mining operations, is inconsistent with the statutory definition in section 701(28). The definition in section 701(28) explicitly excludes coal exploration. It is not clear whether the passage's reference to surface effects is a vague reference to the surface effects of surface activities or is another inconsistency with the statutory language. In the alternative, this might be an anachronism, a reference to an earlier version, that should have been deleted from the final bill. It is also possible that this report statement reflects inconsistencies in Congress' interpretation of 701(28). In any case, if there is a conflict between report language and statutory language, the statutory language must prevail.

Regarding the second quoted passage from the Senate Report, which refers to initial program requirements, we are unsure what Congress intended by this statement. While this passage might be read to provide that subsidence is included in surface coal mining operations, we have never interpreted the SMCRA initial program requirements to apply to subsidence. And that issue is not within the scope of this rulemaking.

Regarding the third quoted passage from the Senate Report, commenters believe this passage is especially significant in light of narrower language in previous Senate reports. For example, one earlier report said, The effect of this definition is that only coal surface mining is subject to regulation under the Act. S. Rep. No. 28, 94th Cong., 1st Sess. 224 (1975); S. Rep. No. 402,

93d Cong., 1st Sess. 74 (1973). Commenters believe the very different language in the 1977 Senate Report was no mere accident, but rather a deliberate choice of more expansive words. We are not sure what significance to attribute to the third quoted passage. That language may be interpreted to confirm our interpretation, because the passage says the definition of surface coal mining operation includes surface operations incident to underground mines, and concludes that the effect is to regulate surface impacts. We believe that by referring to surface operations incident to underground coal mining, the passage may be referring to surface activities incident to underground coal mining. Thus, this may be an imprecise reference to the statutory language. This latter hypothesis is supported by the fact that the passage asserts that the term surface coal mining operation applies to exploration. However, the enacted definition specifically excludes exploration, and we have always interpreted the definition to exclude exploration. For the reasons outlined above, we believe the reading urged by these commenters inconsistent with a careful parsing of the language of section 701(28)(A) and (B), because it would not apply section 701(28)(B) to underground mining.

In summary, the quoted passages from the Senate Report, read alone, do raise some questions about Congress intent, and are not the most precise guidance. However, we believe our interpretation of the language of section 701.28 itself is reasonable. We have found no other interpretation which gives meaning to all parts of the definition.

Commenters also believe that Congress intended to encompass more than merely subsidence effects in including underground mining within the ambit of the term surface coal mining operations. They charge that acid mine drainage, waste disposal, fire hazards, disturbances to the hydrologic balance, surface operations and structures, impacts on fish and wildlife and related

environmental values were impacts of underground mining to be regulated through the application of the performance standards. S. Rep. No. 95-128, 95th Cong., 1st Sess. 98 (1977). We do not take the position that the term “surface operations and surface impacts” of underground mining addresses only subsidence. This rulemaking, however, addresses only the question of whether the prohibitions of section 522(e) apply to subsidence.

Commenters allege that the statutory framework of SMCRA clearly applies the prohibitions of section 522(e) to subsidence, and commenters assert that the House Report supports their allegations. They point to the statement in the report that “environmental problems associated with underground mining for coal which are directly manifested on the land surface are addressed in section 212 [i.e., section 516] and such other sections which may have application.” These problems include surface subsidence [.] H.R. Rep. No. 218, 95th Cong., 1st Sess. 125-126 (1977) (emphasis added).

We do not agree that this portion of the House Report on section 516 supports commenter’s contention. Commenters apparently assume that the emphasized language means that section 701(28) includes subsidence and that therefore, the prohibitions of section 522(e) must apply to subsidence. However, nowhere does the quoted language say this. Commenters cite no basis for such a conclusion; and we know of no basis for that conclusion. We believe the underlined House Report language would include any other SMCRA sections that apply to surface environmental problems associated with underground mining but for the reasons outlined above, we do not agree that sections 701(28) and 522(e) apply to subsidence.

Another commenter points to the Secretary’s statement that subsidence effects constitute “surface impacts” incident to an underground mine. Commenters assert that if Congress had wished

to cover only surface activities as the Secretary suggests, it would not have included the additional word impacts ; and that the Secretary s theory renders this additional word surplusage. We disagree. As discussed above, we interpret 701(28)(A) to apply to surface activities in connection with (1) surface operations and (2) surface impacts incident to an underground coal mine . Thus, if surface impacts are incident to an underground mine, then surface activities in connection with them constitute surface coal mining operations.

Commenters further argue that the Secretary s reading makes no sense. Commenters assert that the reading given by the Secretary [sic] would have the second component of 701(28)(A) include activities conducted on the surface of lands in connection with. . . subject to the requirements of section 516 surface operations and surface impacts incident to an underground coal mine. *Citing* M-Op pp. 2, 13 [100 I.D. 85 at 87, 93 (July 10, 1991)]. Commenters claim there would be no reason for Congress to refer to activities conducted on the surface of lands in connection with. . . surface operations . . . . Once Congress had swept activities within the scope of the definition, nothing additional would be accomplished by adding the word operations. Commenters also suggest that there would be no reason for Congress to refer to activities conducted on the surface of lands in connection with. . . surface impacts.

We disagree. All of the words of the definition are given meaning under our interpretation. Contrary to commenter s assertion, neither surface operations nor surface activities is surplusage or unnecessary under our interpretation. These terms help to delineate what is included and what is excluded. For example, there can be onsite activities that have no connection with the surface operations of the mine. The statutory language excludes such activities from the definition. Further, there may be activities that are not conducted on the surface but are in connection with

surface operations. The statute also excludes these activities from the definition. We also believe there can be surface activities that are not in connection with surface operations or surface impacts of an underground mine, and there can be surface activities in connection with underground impacts rather than surface impacts. We believe Congress intended to exclude all of these types of activities, and that the words of the definition are needed to make this clear.

Commenters assert that the Secretary's statement that section 701(28) does not specifically mention subsidence (62 FR 4868) offers no basis for retreating from the plain meaning of SMCRA. As discussed above, we do not agree with commenter's assumption as to what is SMCRA's plain meaning on this issue. Further, this statement refers to only one of a number of factors we considered in reaching its interpretation. Commenters also argue that acceptance of this statement would require rejection of the Secretary's [sic] own interpretation. These commenters allege that under the Secretary's [sic] interpretation, face-up or mine portal areas associated with underground mines are banned in section 522(e) areas. *Citing* M-Op at 13, n.19 [100 I.D. 85 at 87 fn. 19]. Commenters note that, however, neither section 701(28) nor section 522(e) mentions either of these two items. We do not accept commenter's comparison. Our analysis makes clear that face-up or mine portal areas would come within the terms of 701(28), because they are areas where surface activities disturb the surface in connection with surface operations of an underground coal mine. Commenters also note the Secretary's assertion that section 516 (c) applies to subsidence (*citing* 62 FR 4869), even though the word subsidence never appears there. We have consistently taken the position that subsidence could pose an imminent danger, and thus is within the terms of section 516(c). We note that interpretation of 516(c) is outside the scope of this rulemaking.

Commenters feel the Secretary's assertion that subsidence is regulated only under section 516 is contrary to the House report's reference to such other sections which may have application to subsidence. They argue that since subsidence is explicitly mentioned only in section 516, the only way it can be regulated by other sections is if it constitutes surface coal mining operations, and therefore, it is banned in section 522(e) areas. Commenters' conclusion is flawed. For example, other SMCRA sections that may be applicable to subsidence or subsidence related impacts may include: sections 508 (reclamation plan requirements), 510 (permit approval), 515 (portions concerning prime farmlands) and 720 (subsidence).

According to commenters, because we are unable to explain away these clear expressions of legislative intent, we are reduced to suggesting in effect that, because the Senate Report once refers to surface activities incident to underground mining, any reviewing Court should overlook the word impacts in sections 701(28)(A) and 522(e)(2)(A), and should ignore the three references to impacts and effects elsewhere in the Senate Report. Commenters are wrong. As explained above, we are not overlooking, nor do we advocate overlooking, the use of the term impacts in section 701(28) or 522(e). Rather, our interpretation gives full and reasonable meaning to all terms in those sections. In contrast, commenter's interpretation would render the second half of the definition, at 701(28)(B), inapplicable to underground mining. That interpretation is untenable. Furthermore, we have not ignored the referenced passages in the legislative history. To the extent the passages of legislative history quoted by commenters cannot be explained or reconciled with the language of section 701(28), we believe the language of the Act must prevail.

Commenters also argue that our position is not supported by legislative history allegedly showing that underground and surface mining require significant differences in regulatory



approach. *Citing* 62 FR 4865. In support of their argument, they point out that (1) differences in regulatory approach to the two kinds of mining in areas where they are permitted in no way conflicts with an evenhanded prohibition of both surface mining and the surface impacts of underground mining in the special areas enumerated in section 522(e), and (2) where Congress wanted to allow the Secretary [sic] to accommodate differences between the two kinds of mining, it said so.

Commenters mischaracterize our position.. We believe that not applying 522(e) to subsidence is one of the differences in regulatory approach countenanced by Congress in Title V of SMCRA.

Likewise without merit, commenters charge, is the Secretary's citation of legislative history allegedly showing that most of the impacts of unregulated pre-SMCRA surface mining resulted from surface activities that were more immediate and more readily observable, and the resulting conditions were relatively accessible for reclamation. *Citing* 62 FR 4866. Furthermore, they contend that the Secretary does not explain how this distinction supports exempting subsidence from section 522(e), and they submit that it does not. Commenters assert that, if anything, the greater difficulty of reclaiming subsidence-impacted surface features makes the preventive approach of section 522(e) more necessary, not less. Commenters have offered no basis for these assertions, and we believe neither the record nor our experience support commenters' characterizations. For the reasons given above, we find these comments unpersuasive.

Commenters allege the legislative history of section 720 further confirms that subsidence is covered by the term surface coal mining operations. In support of their position, they submit two points. First, that the final bill enacted by Congress rejected a proposed amendment included in the House committee bill:

Notwithstanding the reference to surface impacts incident to an underground coal mine in paragraph (28)(A), for the purpose of section 522(e), the term surface coal mining operations shall not include subsidence caused by an underground coal mine.

(Section 2805(b) of the committee bill, proposing to add section 701(35)(D) to SMCRA), H.R. Rep. No. 102-474, pt. 8 at 133 (1992).

The authors of this amendment stated that it clearly exempts land surface subsidence from the prohibitions of section 522(e) of the Act. Id. pt. 8 at 133. Commenters believe that the House committee's attempt to exempt subsidence from section 522(e) necessarily reflects the committee's understanding that, absent such an exemption, subsidence was covered by section 522(e). This statement is not necessarily true. It is just as likely that the proposed amendment was rejected because Congress was aware of the language of the Act and its interpretation, including the M-Op, and agreed that section 701(28) is properly interpreted as not including subsidence; so that no further amendment of the Act was required in order to exclude subsidence.

Second, commenters submit that Congress's ultimate rejection of another House committee amendment to SMCRA may raise issues with respect to the interpretation of section 717(b), but does not raise an issue concerning the committee's understanding that provisions in section 701(28) cover surface impacts, not merely surface activities. The House committee proposed an amendment to SMCRA section 717, stating that:

Section 2805(a)(1) would amend section 717(b) of the Surface Mining Control and Reclamation Act of 1977 to clarify the terminology used under that subsection. Recent litigation has called into question whether Congress, in using the term surface coal mine

operation in section 717(b), intended to require underground coal mine operators to replace water supplies....

The Committee, in formulating legislation that was enacted as the Surface Mining Control and Reclamation Act of 1977, did not intend to exclude the impacts of underground mining from the scope of section 717(b). However, in light of the litigation, section 2805(a)(1) amends section 717(b) of the Act with the terminology defined under section 701(28) of the Act so that a clear reading of the law expressly includes the surface impacts incident to an underground coal mine under the scope of section 717(b). H.R. Rep. No. 102-474, pt. 8 at 132 (1992) (emphasis added). However, this proposed amendment was not accepted by Congress. In any case, we believe that Congress' action on this proposed amendment to SMCRA section 717 is irrelevant to the issues in this rulemaking because this action postdated passage of SMCRA and did not concern section 522(e) or section 701(28).

We also received other comments that agree with our analysis of the legislative history. These commenters also argue that a compelling indication of Congressional intent can be found on pages 94-95 of House Report 95-218 (Apr. 22, 1977). The commenters assert that the focus of Congress relative to section 522 in general, and 522(e) specifically, was on surface mining impacts. Commenters argue that the report, under the title of *Land Use Considerations*, addresses the lands unsuitable for mining provision of section 522. The report states:

The committee wishes to emphasize that this section does not require the designation of areas as unsuitable for **surface mining** other than where it is demonstrated that reclamation of an area is not physically or economically feasible under the standards of the act. . . .

Although the designation process will serve to limit mining where such activity is inconsistent with rational planning in the opinion of the committee, the decision to bar surface mining in certain circumstances is better made by Congress itself. Thus section 522(e) provides that, subject to valid existing rights, no surface coal mining operation, except those in existence on the date of enactment, shall be permitted. . . .

As subsection 522(e) prohibits **surface coal mining** on lands within the boundaries of national forests, subject to valid existing rights, it is not the intent, nor is the effect of this provision to preclude **surface coal mining** on private inholdings within the national forests. The language subject to valid existing rights in section 522(e) is intended, however, to make clear that the prohibition of strip mining on the national forests is subject to previous court interpretations of valid existing rights. . . .

(Emphasis added)

H.R. Rep. No. 95-218 at 94, 95.

The commenters argue that the second paragraph goes directly to the Congressional intent to address surface mining in creating 522(e) buffer zones. The commenters also argue that frequent use of the term surface mining while addressing the reclamation related goals in the Act; the discussion about strip mining (which has the same limited meaning as surface mining and surface coal mining) in the national forests; and the absence of any subsidence reference anywhere in this discussion, seem clearly to direct section 522 to surface mining and to exclude subsidence from the realm of consideration.

We agree in part with these comments. While the House Report language quoted by the commenters does refer to the effect of section 522(e) on surface mining, we do not believe that

SMCRA section 522(e) addresses only surface mining. As discussed above, we believe the language of section 701(28) also encompasses surface activities in connection with underground mining, as well as other surface features affected by surface activities. Paragraph (B) includes a lengthy list of specific surface features included in this last category.

### **C. History of interpretation as to applicability of section 522(e) prohibitions to subsidence**

As previously discussed in other sections of this rule, we recognize that there appears to have been inconsistency in our past interpretations. However, we conclude that the majority of past OSM rulemaking and regulatory practices have not considered subsidence to be a surface coal mining operation, have not applied section 522(e) prohibitions to subsidence, and have not required regulatory authorities to do so. Comments on this aspect of this rulemaking fall into two camps. Numerous comments allege that we have consistently taken the position that subsidence is not subject to the prohibitions of 522(e). Other comments assert that we have properly taken the position that subsidence is subject to the prohibitions of 522(e). Both sets of commenters have cited numerous instances to support their positions. Neither position is entirely correct. As discussed above, we acknowledge that our past actions have not been consistent on this issue.

Several commenters argue that in the administrative history of the implementation of SMCRA, we have never interpreted the statute to apply section 522(e) to subsidence. Furthermore, these commenters argue that there exists a longstanding interpretation of SMCRA that section 516 provides the exclusive provision to control subsidence effects. Commenters disagree with our statement in the proposed rule that in the past we have not taken a definitive position on the issue of the applicability of section 522(e) to subsidence. The commenters believe the administrative history

shows from the outset the agency never interpreted the statute to apply section 522(e) to subsidence. These commenters referred to the examples we mentioned in the proposed rule to illustrate that the agency has not taken a consistent and definitive position. The commenters describe these examples as aberrational and pale in comparison to the overwhelming evidence demonstrating that section 522(e) has not been applied in the federal rules or state programs to subsidence. The commenters emphasize that the examples were used by us to describe what the agency calls negative implications, but these commenters feel that the agency has misconstrued the implication properly drawn from these examples. For the reasons discussed above in Part II. B, we do not agree with commenter s assertions that OSM interpretation has consistently been that 522(e) does not apply to subsidence. The proposed rule and this preamble acknowledge numerous past explicit or apparent inconsistencies.

In contrast, other commenters allege that our proposed interpretation is an abrupt substantive change of agency policy, particularly from the 1979 regulations and actions taken by the agency in 1984 and 1985. The commenters assert that in the 1979 rulemaking that established the permanent regulatory program regulations, the agency indicated plainly that the jurisdictional term surface operations and surface impacts incident to an underground coal mine included more than merely surface impacts attendant to the surface operations, but instead included subsidence and other impacts attendant to the underground coal removal itself. As discussed above, we continue to acknowledge that subsidence can be a surface impact incident to an underground coal mine. However, we do not regard this as inconsistent with the final rule s interpretation of section 701(28). And to the extent that our interpretation in this final rule may be a change from any past interpretations, we gave notice in the proposed rule of the proposed interpretation and rationale and

acknowledged various past inconsistencies, so that commenters have had full notice and opportunity to comment.

Commenters further assert that the agency acknowledged in the 1979 rulemaking that the concept of VER applied to underground mining as well as surface mining; an applicability that would be unnecessary if, as the agency now posits, the prohibitions of section 522(e) did not apply to underground mining in the first instance. *Citing* 44 FR 14993, Mar. 13, 1979. We do not agree. As explained above, we continue to interpret section 522(e) as applying to those aspects of underground mining that are surface activities, and the areas and features affected by, incident to, or resulting from surface activities, as set out in more detail in SMCRA section 701(28)(B). Thus, we take the position that 522(e) continues to apply to those aspects of underground mining that constitute a surface coal mining operation. However, those aspects do not include subsidence. Further, as discussed elsewhere in this preamble, this interpretation is consistent with other rules implementing SMCRA, including for example, our rules concerning bonding and permitting, and our definition of adjacent area.

Commenters believe that in the 1979 rules, when we addressed the measurement of the 300-foot buffer zone, we tacitly determined section 522(e) did not apply to underground mining. They allege that our subsequent actions contradict this strained analysis. They point out that in 1981 we published our findings on Greenwood Land and Mining Company's request for a determination of valid existing rights to conduct underground coal mining operations in the Daniel Boone National Forest in Pulaski and McCreary Counties, Kentucky. 46 FR 36758, July 15, 1981. These commenters assert that the discussion of the finding of valid existing rights in that instance makes clear that:

(1) valid existing rights was considered by OSM to be applicable to underground mining activities under section 522(e) lands;

(2) the application of section 522(e) was not limited to face-up areas and those surface areas on which were sited support facilities, but also included the surface overlying underground workings; and

(3) the determination of VER was unrelated to potential subsidence effects but rather attached to the geographic extent of underground mine workings beneath protected lands. 46 FR 36759, July 15, 1981; 47 FR 56192-3, Dec. 15, 1982.

We do not agree with this characterization of our interpretation in the *Greenwood* VER decision. In the July 15, 1981 FR notice laying out the VER findings in *Greenwood*, we noted that VER was requested for three mines, one of which would have five face-ups directed at the same seam of coal. Our VER notice stated:

OSM is in the process of obtaining additional information in order to determine the physical extent of the valid existing rights claimed by Greenwood. OSM is considering basically two alternatives in delineating the exact extent of the VER: (1) have VER over the surface area affected by the face-up and support activities incident to the underground mining; or (2) have VER over those areas (including surface overlying underground workings) contemplated to be affected under the operating plans submitted to the Forest Service prior to August 3, 1977.



. . . . OSM considers that Greenwood s valid existing rights should have the same geographical extent as the mining Greenwood contemplated and was committed to on August 3, 1977. . . .

Because the geographical limits of VER will depend on the evidence available, OSM has decided to reserve the right to use either or both of these alternatives in defining the extent of Greenwood s VER. . . . While the second alternative is preferable and precise geographical limits will be determined wherever possible, there may be cases where such a determination is impossible. In those cases, the first alternative would have to be used.

46 FR 36759, July 15, 1981.

Having concluded that the VER requester had established that it met the all permits VER test, the 1981 determination addressed the extent of the geographical area to which VER would apply. If available documentation delineated for some mines or face-ups only the surface area to be affected by face-up and support activities, VER would be found for only that surface area. The areas over underground workings were not to be delineated on the basis of whether subsidence would occur, but rather solely on the basis of the documentation in mining plans, of the area which Greenwood had committed to mine. If documentation for a particular mine or face-up did not show that, as of 1977, the requester was committed to a specific location and extent for associated underground workings, then VER would extend only to the areas that documentation as of 1977 showed would be affected by surface face-ups and support activities. Thus, in this 1981 VER determination, we

considered VER to attach to those areas for which documentation demonstrated that the mineral owner had committed to mine, as of August 3, 1977.

We note that we issued a similar VER determination approximately one year earlier. That determination, concerning a VER request from Mower Lumber Company, used a similar rationale for a VER determination concerning a similar fact pattern. The requester proposed multiple mines on National Forest lands, but the Forest Service required only that the company show the planned extent of mining for six-month intervals. Because there was evidentiary difficulty in determining geographical limits for VER, we had proposed two options for determining the geographical extent of VER. 45 FR 52468, Aug. 7, 1980.

Under the first alternative, the VER for the actual surface disturbance, face-up, haul roads, etc., would be precisely defined, but the company would be free to deep mine as much coal from the permitted seam(s) as could be reasonably reached by current mining methods using the precisely limited surface disturbances. Under the second alternative, precise geographical limits would be set for both the surface and underground workings. [Emphasis added.]

Notice of the final *Mower* VER determination was published on September 17, 1980 (45 FR 61798). In that decision, we affirmed that Mower had VER at the five mines in question, but reserved decision on the exact extent of VER at all of the mines. We stated that

. . . [A]s a result of limited State and Federal regulation prior to the passage of the Act, there is a limited amount of information relevant to a precise definition of the extent of VER. While the second alternative is preferable and precise geographical limits will be determined wherever possible, there may be cases where such

determination is impossible. In those cases, the first alternative would have to be used.

Id.

Although the language of the two decisions is quite similar, it is not clear whether we were assuming in the later *Greenwood* case that the same consequences specified in *Mower* would follow when documentation as of 1977 showed only areas affected by surface activities. That is, if documentation showed only areas to be disturbed by surface activities, the operator would have VER only for those disturbed surface areas, but could mine all areas reasonably reached using the surface disturbances. And we reach no conclusion as to whether either alternative for VER determination should be read to say that subsidence is prohibited under 522(e), since the decisions did not specifically address whether subsidence was prohibited in the absence of VER. We are not aware of any previous or subsequent VER determinations that utilized the rationale of *Greenwood* or *Mower*. However, to the extent that either decision may be read to be inconsistent with this final rule, this final rule supersedes those earlier decisions.

Commenters believe that the Secretary [sic] reaffirmed the prohibition on subsidence within section 522(e) areas in the decision regarding privately held mining claims within the Otter Creek Wilderness in West Virginia. The commenter notes the Secretary [sic] stated that certain surface impacts to the wilderness could not be avoided, namely subsidence and hydrologic effects. Thus, even the 22 percent accessible from outside the wilderness could not be recovered without causing prohibited surface impacts inside the wilderness area. 49 FR 31228, 31233, Aug. 3, 1984. To further support this point of view, these commenters also point to a decision by OSM to require two mining companies about to conduct underground mining operations which would disturb the surface

of federal lands to obtain permits under SMCRA and subject them to the provisions of section 522(e)(2). Ramex Mining Corp. v. Watt, 753 F.2d 521, 523 (6th Cir. 1985). As noted above, in Part II.B.3. of this preamble, we agree that the Otter Creek decision did conclude that subsidence from underground mining is a prohibited surface impact under section 522(e). However, in part for the reasons set out in Part III. A. of this preamble, we do not agree that Ramex clearly supports the commenter's point. It is not clear from the decision whether the Ramex operation would have included surface activities on the national forest lands in question, and to conduct such activities would require VER under any interpretation.

Commenters also allege that the proposed interpretation is an abrupt substantive change from the 1988 proposed rule which proposed two options: banning all subsidence, or banning subsidence causing material damage; but did not seriously contemplate denying the applicability of the prohibitions to any surface impacts associated with underground mining. These commenters also assert that the preamble to that proposed rule stated that "The definition of surface operations and \* \* \* impacts incident to an underground coal mine," was promulgated specifically to apply to 30 CFR 761.11(b), the rule which implements the section 522(e)(2) prohibition against mining on Federal lands in National forests. We indicated in our 1978-79 rulemaking that, at a minimum, subsidence causing material damage was prohibited in section 522(e)(2) areas[.] *Citing* 53 FR 52381, Dec. 27, 1988.

In December 1988, we proposed two alternative policies on the applicability of section 522(e) to subsidence. One proposal was that all subsidence would be subject to the prohibitions of section 522(e). The other proposal was that subsidence causing material damage would be subject to section 522(e). 53 FR 52374, Dec. 27, 1988. We withdrew the 1988 proposed rule. That

withdrawal was not challenged , and no policy was established by the 1988 proposal. Therefore, we are not required to justify any changes from that withdrawn proposed rule. Nonetheless, we did discuss in the 1997 proposed rule our reasons for departing from the alternatives considered in the 1988 proposed rule. Those reasons, which continue to apply, can be summarized as follows:

One alternative proposed in 1988 was based on the argument that subsidence is a surface impact of underground mining, that surface impacts of underground mining are surface coal mining operations under section 701(28), and thus that all subsidence is a surface coal mining operation prohibited under section 522(e). One problem with this interpretation is that subsidence may or may not cause surface damage. We believe that Congress did not intend to prevent subsidence that causes no surface damage. All of the congressional concern about subsidence from underground mining is expressed in discussions of the damage caused by subsidence, and Congress repeatedly recognized that there was little concern about subsidence that caused no significant damage to surface features or uses or to human life or safety. *See* H.R. Rep. No. 218, 95th Cong., 1st Sess. 126 (1977); H.R. Rep. No. 1445, 94th Cong., 2d Sess. 71-72 (1976); HR. Rep. No.896, 94th Cong., 2d Sess. 7374 (1976); HR. Rep. No. 45, 94th Cong. 1st Sess. 115-116 (1976); H.R. Rep. No. 1072, 93d Cong., 2d Sess. 108-109 (1974). Indeed, there is little reason to regulate or prohibit subsidence that does not impair surface features and uses and does not endanger human life or safety.

Thus, we conclude that application of the section 522(e) prohibition to all subsidence would be unnecessarily restrictive, in light of Congress' recognition that subsidence would typically cause no significant damage to agriculture and similar uses. Many of the types of features listed in section 522(e) are low-intensity uses that are similar to agricultural land uses in that they have relatively low vulnerability to significant damage from subsidence.

This 1988 proposed alternative was also based in part on the argument that, given the serious congressional concern about subsidence, it would be illogical to conclude that Congress did not intend to include subsidence within the definition of "surface coal mining operations" or that Congress would have allowed subsidence within the areas protected by section 522(e). For two reasons, we do not now find this argument persuasive.

First, under SMCRA, certain impacts of coal mining are subject to regulation even if they are not included in the definition of a surface coal mining operation and are therefore not subject to the prohibitions of section 522(e). For example, offsite water supply diminution and air and water pollution attendant to erosion are also specifically regulated under SMCRA, even though they are not surface coal mining operations per se. SMCRA sections 515(b)(4) and 717. 30 U.S.C. 1265(b)(4) and 1307. The same is true for subsidence. Therefore, it is not necessary to include subsidence within the definition of a surface coal mining operation in order to regulate subsidence under sections 516 and 720.

Second, as noted above, there are no significant lapses in regulatory coverage under our proposed reading of SMCRA, since subsidence is fully and specifically regulated under sections 516 and 720. The requirements of the existing regulatory scheme for subsidence apply equally in areas covered by section 522(e) and in those not so covered.

The other alternative that we proposed in 1988 was that subsidence causing material damage is a surface coal mining operation subject to section 522(e). Proponents of this alternative contend that Congress intended that only subsidence that causes material damage be precluded. Prohibition of material damage would not preclude underground mining of all section 522(e)(4) and (e)(5)

areas, because an operator could either negotiate a waiver of the prohibition or purchase the protected features.

We did not find the arguments for a material damage standard persuasive for several reasons. First, as outlined above, a material damage standard does not comport with the parsing of the definition at SMCRA section 701(28)(A), which we believe best gives meaning to all of the words of the statutory provision and therefore is the best and most reasonable interpretation of the language of section 701(28).

Second, as outlined above, we believe the best interpretation is that Congress intended to regulate subsidence under sections 516 [and subsequently 720], rather than under section 522(e), as indicated by both the provisions of the Act and the legislative history.

Third, application of a material damage test might result in significant costs and impairment of underground mining. This is because section 516(b)(1) requires prevention of material damage only "to the extent technologically and economically feasible," while a material damage threshold for applying section 522(e) would require prevention of all material damage.

We believe that, if subsidence causing material damage were prohibited, an operator would be precluded from causing subsidence except to the extent the operator could demonstrate that:

(1) although subsidence might occur under the protected features, no material damage would occur from the subsidence;

(2) the operation would avoid mining within the area from which subsidence could damage the protected features; or

(3) under the exceptions in section 522(e), the operator had, for example, obtained waivers from homeowners or permission from the regulatory authority concerning subsidence under public roads.

To the extent that these requirements would significantly increase the costs of mining, or significantly decrease the amount of coal available for mining, the material damage standard also would frustrate Congress' expressed intent to encourage full utilization of coal, to ensure an expanding underground mining industry and to encourage longwall mining. For example, as we determined in the EIS concerning this rulemaking, withholding of 10 percent of waivers for 522(e)(5) homes could make longwall mining economically infeasible. *See* Final EIS, 1999.

It is true that section 522(e) and section 561(c) would not be coextensive in their coverage, assuming section 522(e) applied to subsidence. Nevertheless, there would be a substantial overlap between the two provisions. Moreover, as discussed above, we conclude that subsidence was not intended to be addressed in section 522(e), and to apply the prohibitions of section 522(e) to material damage from subsidence would frustrate congressional aims in a way that is not mandated by the terms of the Act or supported by its legislative history.

Commenters also note that the coal states that already apply the prohibitions of section 522(e) to subsidence must have concluded that the prohibitions are fully consistent with a healthy coal industry. We do not agree. As discussed above, with the exception of Colorado, Illinois, Indiana, and Montana, states with active underground coal mining do not prohibit subsidence in areas protected under section 522(e). Rather, states regulate the effects of subsidence pursuant to sections 516 and 720 of SMCRA. Those regulations provide for the mitigation, repair, and compensation for subsidence and material damage to certain structures and to lands. As discussed, Montana has no defined policy regarding the regulation of subsidence. This is due in part to the fact that the State has only one underground mine, which has not begun production. Montana did not submit comments on the proposed rule. No states have commented that requiring states to apply the 522(e)



prohibitions to subsidence is appropriate. In fact, states commented that the proposed rule would clarify, once and for all, that certain prohibitions on surface mining near occupied dwellings, public roads, and on federal lands within national forests, do not apply to subsidence from underground mining.

State commenters unanimously support continuation of the status quo; that is, the prohibitions of section 522(e) do not apply to subsidence. State commenters agree with our analysis that adequate means of control are available to the states and the federal government through existing statutory provisions to insure that the effects of subsidence are mitigated. The State commenters welcome clarification of the statutory requirements and assert that the interpretation enables the States to retain the flexibility that regulatory authorities need to effectively regulate coal mining operations and protect the environment.

The State of Colorado concurs with our interpretation, and indicates that the State has always concurred with this interpretation by practice. Colorado commented that the State prohibits material damage to any structure through State regulations pursuant, in part, to section 516 of SMCRA. Further, the State noted that, although it does not invoke the prohibitions of section 522(e) in addressing subsidence impacts of proposed underground coal mining, the State consistently requires subsidence inventories and control plans to identify and mitigate any potential material damage due to subsidence of structures or renewable resource lands. Colorado confirmed that it does not allow material damage to structures even with landowner waivers or VER.

Illinois also supports our interpretation inasmuch as Illinois prohibits planned subsidence in section 522(e) areas. Illinois indicates that they have historically applied the prohibitions of

section 761.11 indirectly . An internal State policy was intended to provide protective procedures when planned, predictable and controlled subsidence was proposed under dwellings and roads. Under the State program, planned subsidence operations are required to establish VER via a takings test prior to subsidizing the protected lands and features. However, absent VER, Illinois would allow subsidence within the established buffer zones if:

- (1) the right to subside within the buffer zone was established, and
- (2) the protected land or feature in question would not be materially damaged or adversely impacted by the adjacent subsidence operations.

In their comments, Illinois agrees with our analysis that existing regulations and the Federal subsidence regulations (60 FR 16722, Mar. 31, 1995) provide adequate safeguards to protect the public without applying the prohibitions enumerated under section 761.11. Illinois also points out that if VER were to apply, the good faith all permits standard would effectively eliminate longwall mining under most protected features. Illinois believes the ability to permit planned subsidence that would either not impact a protected feature, or could be effectively mitigated would be arbitrarily lost as few operators could pass the good faith all permits standard.

Indiana also supports our interpretation that the prohibitions of section 522(e) do not apply to subsidence because it best fits Congressional intent to encourage underground mining in SMCRA. Indiana applies the 522(e) prohibitions unless a waiver or other form of subsidence right is obtained. Indiana requires proof of acquisition of the right to subjacent support, or a waiver, to conduct planned subsidence mine operations. Indiana indicates that adoption of the proposed interpretation will not change Indiana's regulatory program because either one of these two conditions is necessary regardless of the existence of 522(e) buffer zones. Indiana notes that our

interpretation protects both Indiana homeowners and the development of Indiana's valuable natural energy resources as required by Congress.

Indiana believes that:

(1) a change from the proposed rule would require a major overhaul of its regulatory program without a commensurate benefit to the citizens, the environment, the economy or the State; (2) without a demonstrated need, a requirement to overhaul the state subsidence programs would waste state and federal resources provided by the taxpayers;

(3) the regulations, and in some cases Indiana's SMCRA, would need to be rewritten which would take several years;

(4) the rules would have to be written to require the entire shadow area to be included in the permit area, and therefore bonding for the shadow area would be required; and

(5) rules would be needed to address bond release for revegetation and structural restoration requirements.

#### **D. Regulatory gap--Adequacy of SMCRA protection of 522(e) features from subsidence damage**

Some commenters disagree with our statement in the proposed rule preamble (62 FR 4868-69, 4871, Jan. 31, 1997) that sections 516 and 720 adequately address subsidence. Commenters believe the mandatory duty, imposed by the first clause of section 516(b)(1), to prevent subsidence damage is softened by (1) limiting its scope to cover only material subsidence damage and (2) including a feasibility standard "to the extent economically and technologically feasible . We do

not agree. Other commenters believe that the material damage standard for regulating subsidence from underground mines is a flexible enough concept to provide heightened scrutiny of any permit application for mining beneath (e)(1) areas. We believe that subsidence protections under section 516 and 720 are adequate. We believe the legislative history demonstrates that these sections address the subsidence impacts Congress was concerned about, and we believe it is clear Congress intended to impose these limitations.

Some commenters assert that section 522(e) reflects Congress's determination that certain special areas require more protection than section 516(b)(1) can offer. Furthermore, in these limited areas, commenters believe Congress imposed on operators a mandatory duty not only to prevent subsidence from causing material damage to the extent feasible, but to prevent it altogether. They also note that the Secretary advanced, and the D.C. Circuit upheld, an interpretation providing that section 516(b)(1) does not mandate the restoration of structures damaged by subsidence. [This interpretation predated enactment of SMCRA section 720.] National Wildlife Federation v. Lujan, 928 F.2d 453 at 456-60 (D.C. Cir. 1991). These commenters allege that, if the Secretary [sic] believes Congress intended this interpretation of section 516(b)(1), it is all the less likely Congress intended dwellings and the other important structures listed in section 522(e) to be left without the benefit of section 522(e)'s preventive mandate. We do not agree. We believe that in section 522(e) areas, Congress did not intend to prohibit subsidence, but rather to prohibit those surface activities and those areas and features resulting from, incident to, or affected by surface activities, that are surface coal mining operations within the terms of 701(28).

Commenters point to a discussion of the 1988 proposed rule in the M-Op: [M]any of the types of features listed in section 522(e) are low-intensity uses that are similar to agricultural land uses in

that they have low vulnerability to significant damage from subsidence. These commenters believe Congress included national parks, wilderness areas, and other key recreational lands in section 522(e), but excluded agricultural land, and that the Secretary [sic] ignored this fact. The commenters further conclude that Congress did not consider farmland similar for purposes of section 522(e). Moreover, referring to a draft EIS that accompanied an earlier VER proposed rule, the commenters submit that the Secretary conceded that the impacts of subsidence on such low-intensity land uses as national parks and wilderness areas are quite serious indeed.

We disagree with these commenters' conclusions. We continue to believe many features protected under section 522(e) have low intensity uses that are not particularly vulnerable to subsidence damage, similar to certain low-intensity uses viewed by Congress as having low vulnerability. The fact that Congress did not address agricultural lands in section 522(e) is not particularly relevant to this point.

We believe the EIS accompanying this rulemaking best evaluates the relative impacts of the alternatives considered for this rulemaking. An extensive discussion of this issue can be found in Chapter IV of the EIS accompanying this rulemaking. *See* Final EIS, 1999.

Section 522(e) areas with low-intensity uses that are not particularly vulnerable to significant damage from subsidence may include many (e)(1), (2), (3), and (4) areas, as well as many (e)(5) public parks. But in any case, we do not argue that subsidence will never have impacts on the surface of 522(e) lands. And, as discussed above, we believe Congress was concerned with subsidence only insofar as it causes significant damage or danger, and was focused on control rather than prohibition of subsidence.

Another group of commenters argue that nothing in sections 516 or 720 purports to modify either section 522(e) or the definition of surface coal mining operations in section 701(28). The commenters go on to note that Congress has clearly provided in sections 516 and 720 that subsidence is (subject to exceptions) prohibited in section 522(e) areas and that it is not the Secretary's [sic] prerogative to substitute the Department's views of public policy for Congress's.

We agree that neither section 516 nor section 720 modifies section 522(e) or section 701(28). However, we disagree with these commenters' other conclusions. Based on a plain reading of the language of the relevant provisions we also believe that neither section 516 nor section 720 includes provisions that specifically interpret 522(e) and its applicability to subsidence. We believe that Congress intended section 516(c) [and subsequently 720], in combination with other regulatory provisions of SMCRA, to offer sufficient regulation of subsidence damage to those features that Congress considered vulnerable to significant impairment from subsidence. We believe that the existence of this comprehensive regulatory scheme in section 516 [and subsequently 720] makes it unlikely that Congress also intended to prohibit subsidence under section 522(e).

Another group of commenters argue that our interpretation of the language at section 516(d), as well as the language itself, confirms that subsidence is a surface impact [ ] incident to an underground coal mine within the meaning of sections 701(28) and 522(e). These commenters further note that section 516(d) applies to surface operations and surface impacts incident to an underground coal mine, and that this is essentially the same language used in section 701(28)(A) and 522(e)(2)(A).

Commenters also argue that our rulemaking invoking section 516(d) as authority for a regulation requiring bonds for subsidence demonstrates that we have in the past deemed subsidence

to fall within the scope of this key phrase. We agree that subsidence can be a surface impact incident to an underground coal mine. However, as outlined above, we do not agree that a surface coal mining operation includes surface impacts per se; rather this term includes surface activities (under section 701(28)(A)) and the surface features affected by those activities (under section 701(28)(B)).

One group of commenters argues that our reasoning that subsidence must be regulated only by sections 516 and 720 is nullified since sections 516 and 720 do not contain all the requirements which apply to underground activities. Commenters argue that subsidence is also regulated under other sections. As noted above, we agree that other SMCRA provisions may apply to subsidence and subsidence-related impacts. However, performance standards for subsidence are set out primarily in sections 516 and 720. And, we believe that no regulatory gap results when section 522(e) does not apply to subsidence because sections 516 and 720 provide ample authority to regulate surface effects of underground mining under existing regulations. The detailed description of the existing relevant regulations in Part I of this preamble demonstrates that our permanent program regulations implementing sections 516 and 720 provide broad subsidence protection; that a prohibition of subsidence within the buffer zones around dwellings, roads, and other surface features listed in section 522(e) would be superfluous; and that no regulatory gap results from our interpretation. We have full authority under sections 516 and 720 and other SMCRA provisions, to develop additional regulations to protect any environmental values or public interests that warrant additional protection beyond that currently provided.

Some commenters assert that section 720 does not provide complete protection against mining impacts, and certainly does not give the same protection to the interests of surface landowners that

section 522(e) would give if applied to subsidence under homes. Furthermore, commenters believe that while the law requires water supply replacement and subsidence compensation or repair, implementation of that law is problematic in the best of circumstances. Commenters argue that even in cases where subsidence is the causation, it is difficult to prove that the water loss is mine-related. Commenters also note that there can be a cost to the homeowner for hiring counsel or private consultants to develop evidence; and that it can take months or years to get water replacement. Commenters further argue that such replacement is rarely of comparable quality, and certain state laws, such as Pennsylvania law, do not extend the full protections intended by section 720. Further, commenters believe that some losses and impacts, even where mine-related, are not addressed by provisions other than section 522(e). Commenters note that unremediated impacts may include: the loss of use or habitability of a structure due to water loss, cost of temporary housing during such water loss; the ruined pumps, stained clothing and fixtures; and destroyed washers, dryers and other appliances. We agree that the impacts of subsidence on property owners are very real. These impacts can include, for example, emotional stress from the process of being subject to subsidence, lost productivity, potentially depressed property values, and other economic impacts. However, we believe that SMCRA addresses these impacts under sections 516 and 720, and related regulatory provisions, to the extent that Congress intended to address them in SMCRA.

Commenters allege that the subsidence regulations published in March 1995, as mandated by EPAct, are very limited and inadequate to protect section 522(e) resources from subsidence. Furthermore, commenters believe the EPAct is limited to subsidence damage to any occupied residential dwelling and structures related thereto, or non-commercial building and damage to any drinking, domestic, or residential water supply from a well or spring in existence prior to the



application for a surface coal mining and reclamation permit . Commenters assert that many section 522(e) structures are among the areas that lack EAct protection. During the preparation of the final regulation implementing EAct, timely comments concerning the merits of the rulemaking were considered; and further comments on the adequacy of the protection established by Congress in EAct s provisions on subsidence protection, or on the rules implementing those provisions, are outside the scope of this rulemaking.

Commenters point to a lawsuit that was subsequently filed against the Department of the Interior, alleging that our 1995 subsidence regulations, (62 FR 16722, Mar. 31, 1995) went beyond the intent of the Energy Policy Act. Commenters argue that even if the EAct regulations are upheld, every provision will likely be the subject of prolonged disputes, appeals and litigation by coal operators who are reluctant to minimize damage, pay compensation or make repairs.

Commenters assert that the existence of any real or imagined basis for dispute will be exploited by coal operators who will delay resolution for years until courts provide absolute answers and that these disputes will cause major delays and lack of repair and compensation. We disagree with the commenters assumption regarding anticipated problems in implementation. We expect the rules will be implemented in good faith, and that any disputes as to proper implementation are appropriately handled through existing administrative and judicial procedures on a case-by-case basis. Further, these comments address anticipated concerns about implementation of a separate rulemaking and are outside the scope of this rulemaking.

Commenters express concerns that the Secretary s [sic] interpretation will place an additional economic burden on homeowners and will threaten the recreational value of national parks and other protected lands. These commenters point to statements in the M-Op that:

We have seen no firm or final conclusion as to the extent to which costs and impairment would occur. Review of a preliminary draft Environment [sic] Impact Statement indicates that OSM has initially determined that there would be no significant decrease in coal production from application of a material damage standard .

*Citing* M-Op at 21, n.27 [100 I.D. 85 at 99, fn 27].

Commenters then point to another statement in the M-Op:

[If] that is true, interpreting section 522(e) as prohibiting subsidence causing material damage would add nothing to the protections already afforded by section 516(b)(1). *Id.*

Commenters argue that application of section 522(e) to subsidence, while not adversely affecting coal supply or price, will provide key benefits by shifting subsidence-prone underground mining outside of the important areas protected by section 522(e).

These commenters are addressing statements that are not included or relied on in either the proposed or final rule. The referenced statements were made by the Solicitor in a footnote in the 1991 M-Op before preparation of the Draft EIS or Final EIS for this rulemaking. As quoted by the commenters, the Solicitor noted that at the time of preparing the M-Op he had seen no firm or final conclusion as to the extent to which costs and impairment would occur. Thus, the Solicitor acknowledged that his tentative evaluation in the 1991 footnote had no basis in current and firm analysis by OSM. We believe the Final EIS and EA that accompany this rulemaking best evaluate the relative impacts of the alternatives considered in this rulemaking. *See* Final EIS, 1999; Final E A, 1999.

Those documents indicate that the application of section 522(e) prohibitions to subsidence would have relatively small impact on the overall extent of mineable coal reserves. However, we do not agree that there would be little impact on coal costs for the nation. The Economic Analysis, which was prepared under guidelines issued by the Office of Management and Budget (OMB), demonstrates that, if waiver withholding rates were to exceed 10% a substantial part of the longwall mining industry could be shut down. Mining would shift to alternative coal reserves but at an additional cost to the nation estimated to be upwards of \$2.65 billion over the next 20 years. The commenter is referred to Chapter V of the Final EA for additional details. We considered both costs and benefits in analyzing alternative rules concerning the application of 522(e) prohibitions to subsidence. In our EIS and EA, we attempted to analyze sufficient cost and benefit information (both quantitative and qualitative) to determine the relative magnitude of net costs and benefits for the entire country from alternative subsidence rules.

Commenters also charge that the SMCRA post-subsidence bonding regulations are inadequate to protect the homeowner, particularly if subsidence does not occur for several years. The commenters allege that when the bond is needed to cover subsidence-related damage, the company that caused the subsidence may have been dissolved, gone bankrupt or lack sufficient resources to ensure an adequate bond. These comments address anticipated concerns about implementation of a separate rulemaking addressing subsidence issues (60 FR 16722, Mar. 31, 1995), and therefore the comments are outside the scope of this rulemaking. We expect that any disputes as to proper implementation are appropriately handled through existing administrative and judicial procedures.

One commenter referenced a local (Alabama) study that concluded that, after eight years the subsidence over a longwall panel is still measurable. The commenter believes this study supports

his assertion that subsidence is not a short term effect. The commenter believes that subsidence precludes the area above longwall mining from use for any significant residential or other structures. He further notes that in addition to the protracted changes that subsidence brings, all affected insurance companies studied have terminated casualty homeowner s insurance in the vicinity of longwall mining. The commenter provided no documentation of this allegation, but we agree this may be a serious concern. However, it appears that this concern is primarily the result of local insurance practices, and outside the scope of this rulemaking. We did not receive any other comments to this effect.

#### **E. Impacts on underground mining if prohibitions do apply to subsidence**

As discussed in this preamble, after considering the comments on this matter, we continue to believe that subsidence is possible from room-and-pillar underground mining and other underground technologies, and is a virtually inevitable consequence of longwall mining. Therefore, prohibiting subsidence below homes, roads, and other features specified in section 522(e) could make mining substantially less feasible and could substantially reduce coal recovery in areas where these features are common .

As discussed previously in this preamble, if the section 522(e) prohibitions applied to subsidence from underground mining, mining would be precluded in all portions of the underground workings where mining would cause subsidence affecting a protected surface feature. Thus, to ensure that subsidence would not take place within a surface area specified in section 522(e), underground mine operations would be required to leave coal in place around each protected feature for a horizontal distance much larger than the protected area. In many cases, the amount of coal left

in place to support dwellings would result in a pattern of irregular mined areas that would eliminate the contiguous coal reserves needed to make longwall operations economic. Consequently, few new longwall mines would be opened. As discussed in the Economic Analysis, if waiver withholding rates were to exceed 10% a substantial part of the longwall mining industry could be shut down. Mining would shift to alternative coal reserves but at an additional cost to the nation estimated to be upwards of \$2.65 billion over the next 20 years.

#### **F. Codification of the final rule**

In the proposed rule (62 FR 4871, Jan. 31, 1997) , we solicited comments on the need to amend 30 CFR Chapter VII to codify our interpretation that section 522(e) does not apply to subsidence from underground coal mining activities, or the underground activities that may lead to subsidence. A group of commenters suggested that we should codify this interpretation. We agree and have codified the interpretation at 30 CFR 761.200. Codification will allow interested persons to ascertain our policy from the regulations at 30 CFR part 761, without having to locate and refer to the Federal Register preamble for this rulemaking.

#### **IV. Procedural Matters.**

##### **A. Executive Order 12866: Regulatory Planning and Review.**

This document is a significant rule and has been reviewed by the Office of Management and Budget under Executive Order 12866.

(a) This rule will not have an effect of \$100 million or more on the economy. It will not adversely affect in a material way the economy, productivity, competition, jobs, the environment,

public health or safety, or State, local, or tribal governments or communities. This determination is based on a cost benefit analysis which was prepared for the final rule. The cost benefit analysis indicated that the cost increase resulting from the rule will be negligible. A copy of the analysis is available for inspection at the Office of Surface Mining, Administrative Record - Room 101, 1951 Constitution Avenue, NW, Washington, D.C. 20240. A single copy may be obtained by writing OSM or calling 202-208-2847. You may also request a copy via the Internet at: [osmrules@osmre.gov](mailto:osmrules@osmre.gov).

(b) This rule will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. The rule will not significantly change costs to industry or to the Federal, State, or local governments. Furthermore, the rule will have no adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States enterprises to compete with foreign-based enterprises in domestic or export markets.

(c) This rule does not alter the budgetary effects of entitlements, grants, user fees, or loan programs or the rights or obligations of their recipients because the rule does not effect such items.

(d) This rule does raise novel legal and policy issues as discussed in the preamble.

#### B. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., the Department of the Interior certifies that this rule will not have a significant economic impact on a substantial number of small entities. This certification is based on the findings that the rule will not significantly change costs to industry or to the Federal, State, or local governments. Furthermore, the rule will have no adverse

effects on competition, employment, investment, productivity, innovation, or the ability of United States enterprises to compete with foreign-based enterprises in domestic or export markets.

C. Small Business Regulatory Enforcement Fairness Act.

This rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act, because it will not:

- Have an annual effect on the economy of \$100 million or more.

- Cause a major increase in costs or prices for consumers; individual industries; Federal, State, or local government agencies; or geographic regions because the rule does not impose any substantial new requirements on the coal mining industry, consumers, or State and local governments. It essentially codifies current policy.

- Have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises for the reasons stated above.

D. Unfunded Mandates Reform Act of 1995.

This rule does not impose an unfunded mandate on State, local, or Tribal governments or the private sector of more than \$100 million per year. The rule does not have a significant or unique effect on State, local or Tribal governments or the private sector. Therefore, a statement containing the information required by the Unfunded Mandates Reform Act (1 U.S.C. 1531, et seq.) is not required.

E. Executive Order 12630: Takings.

In accordance with Executive Order 12630, this rule does not have significant takings implications.

The rule is an interpretative rule which does not alter existing regulatory requirements.

F. Executive Order 13132: Federalism.

In accordance with Executive Order 13132, this rule does not have Federalism implications.

The rule does not impose any new regulatory requirements. The rule:

(a) Does not substantially and directly affect the relationship between the Federal and State governments;

(b) Does not impose substantial direct compliance costs on States or localities; and

(c) Does not preempt State law.

G. Executive Order 12988: Civil Justice Reform.

In accordance with Executive Order 12988, the Office of the Solicitor has determined that this rule

(1) does not unduly burden the judicial system and (2) meets the requirements of sections 3(a) and 3(b)(2) of the order.

H. Paperwork Reduction Act.

This rule does not contain collections of information which require approval by the Office of Management and Budget under 44 U.S.C. 3501 et seq.



I. National Environmental Policy Act of 1969 and Record of Decision.

This rule, issued in conjunction with the rule defining Valid Existing Rights (RIN 1029-AB42), constitutes a major Federal action significantly affecting the quality of the human environment under the National Environmental Policy Act of 1969 (NEPA). Therefore, we have prepared a final environmental impact statement (EIS) pursuant to section 102(2)(C) of NEPA, 42 U.S.C. 4332(2)(C). A separate notice of the availability of the EIS was published by the Environmental Protection Agency in this edition of the Federal Register. A copy of the final EIS, Proposed Revisions to the Permanent Program Regulations Implementing Section 522(e) of the Surface Mining Control and Reclamation Act of 1977 and Proposed Rulemaking Clarifying the Applicability of Section 522(e) to Subsidence from Underground Mining, OSM-EIS-29 (July, 1999) is available for inspection at the Office of Surface Mining, Administrative Record - Room 101, 1951 Constitution Avenue, NW, Washington, D.C. 20240. A single copy may be obtained by writing OSM or calling 202-208-2847. You may also request a copy via the Internet at: [osmrules@osmre.gov](mailto:osmrules@osmre.gov).

This preamble serves as the Record of Decision under NEPA. Because of the length of the preamble, the following is offered as a concise summary. The EIS that was prepared addressed the general setting of the proposal, its purpose and need, the alternatives considered, existing environmental protection measures, the affected environment, the environmental consequences, and overall consultation and coordination activities. In addition, the EIS discussed the regulatory protections of SMCRA.

We used a generic mine impact analysis on a hypothetical site-specific basis to describe impacts to certain resources when surface and underground mining operations are conducted within,

and adjacent to, section 522(e) areas (see Chapter IV of the EIS). In addition, we estimated the coal resources within the areas defined by section 522(e) and subjected them to various tests and assumptions to provide an estimate of the number of acres over a 20 year period (1995 to 2015) that could be affected. Using the generic mine impact analysis and the potentially affected acreage of section 522(e) areas, we were able to provide a measure of the relative degree of potential impacts under each alternative. Finally, we evaluated the combined effects of the VER and the Prohibitions alternatives to describe the impacts of underground mining.

### **Alternatives Considered**

We identified five alternatives for determining the applicability of the section 522(e) prohibitions to subsidence resulting from underground coal mining. None of the alternatives authorizes mining. A person must submit a permit application that complies with all applicable permitting requirements in order to obtain a permit to mine. All Federal permitting decisions require site-specific NEPA compliance in addition to this EIS. The alternatives considered 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).

No Action (NA) Alternative: Under the NA alternative, we would not promulgate rules and we would be guided by the Solicitor's Memorandum Opinion (M-36971) of July 10, 1991, which advised that subsidence from underground mining is properly regulated solely under SMCRA section 516 and not under section 522(e). Under this alternative, States would continue to regulate subsidence as provided in their approved regulatory programs.

Prohibitions Do Not Apply (PDNA) Alternative: This was the preferred alternative. Under this alternative we 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 the SMCRA definition of surface coal mining operations, set out in SMCRA Section 701(28), includes only surface activities and the facilities and areas affected by or incidental to these surface activities, and that subsidence from underground mining would not be deemed a surface coal mining operation. The performance standards in sections 516 and 720 of SMCRA and the implementing regulations in 30 CFR Parts 783, 784, and 817 would still apply. Surface activities and surface features affected by surface activities in connection with 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 we 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 could demonstrate that underground mining would not reasonably be expected to result in subsidence that causes material damage, underground mining would be prohibited in section 522(e) areas.

Prohibitions Apply If There Is Subsidence (PAS) Alternative: Under this alternative we 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.

Prohibitions Apply (PA) Alternative: Under this alternative we would determine through rulemaking that any potential subsidence would be considered a surface coal mining operation 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 would also be prohibited if it would cause subsidence within the protected area.

## **Decision**

For the reasons set forth in this preamble, OSM interprets section 522(e) as not applying to subsidence from underground mining. This decision is based on an extensive analysis of the statute, the legislative history, relevant case authority, public comments, and our regulatory actions with respect to the applicability of section 522(e) to subsidence from underground mining. With certain exceptions, section 522(e) prohibits surface coal mining operations on certain congressionally designated areas. The best reading of section 701(28) is that surface coal mining operations does not include subsidence, and that therefore the prohibitions of section 522(e) do not apply to subsidence from underground mining. This is consistent with legislative intent. Subsidence is properly regulated under sections 516 and 720 and related provisions of SMCRA and not under section 522(e). Although regulation under sections 516 and 720 and related provisions may not have precisely the same effect as regulation under section 522(e), regulation under sections 516 and 720 will achieve full protection of the environmental values which Congress sought to protect from subsidence under SMCRA while encouraging longwall mining. This interpretation will promote the general statutory scheme of SMCRA and fully protect the environment and the public interest. We

also believe this interpretation best balances all relevant policy considerations, including the competing environmental and economic considerations involved in this rulemaking.

The language of SMCRA demonstrates that Congress intended to encourage underground mining, especially full-extraction methods such as longwall mining, and application of the prohibitions of section 522(e) to subsidence could substantially impede longwall and other full-extraction mining methods. Therefore, including subsidence in the definition of "surface coal mining operations" at section 701(28), and application of the section 522(e) prohibitions to subsidence, would fail to accommodate congressional recognition of the importance of underground mining and longwall mining in particular.

The final decision balances the interests of surface owners and industry, maintains stability in SMCRA implementation, promotes safety, acknowledges existing property rights, and results in no regulatory gap. The following points discuss the findings with respect to these considerations.

(a) Balances the interests of surface owners and industry: Our interpretation recognizes that in most cases the mineral owner purchased the property right to undermine, and probably to subside, upon acquisition. Thus, our interpretation best balances both the surface and mineral owner's interests, because our interpretation ensures that both the public interest and the property rights of the surface owner are protected under SMCRA's subsidence control requirements while allowing the mineral owner to make the safest and most efficient use of their mineral rights consistent with those subsidence control requirements.

(b) Maintains stability in SMCRA implementation: The final rule will cause minimal disruption to existing and longstanding State and Federal regulatory programs and the expectations associated with them. The existing provisions adequately protect section 522(e) features and

therefore do not require change. Thus, this rule avoids unnecessary change in state administration of regulatory programs, enables the states to retain flexibility in regulating coal mining operations and protecting the environment, and allows states to address differences in terrain, geology, and other conditions when regulating subsidence.

Finally, application of the section 522(e) prohibition to subsidence could require a major overhaul of State regulatory programs without a commensurate benefit to the citizens, the environment, the economy or the State. Existing subsidence controls pursuant to State and Federal programs properly implement SMCRA. Without a clearly demonstrated need, a requirement to impose new administrative burdens and costs would waste State and Federal resources.

(c) Promotes safety: Longwall mining has become the safest and most productive and economic underground mining method. The result of this mining technique is almost immediate subsidence that is highly predictable as to how much the surface will subside. In terms of worker safety, the longwall system also offers a number of advantages over room-and-pillar mining. It improves safety through better roof control and reduction in the use of moving equipment. It eliminates roof bolting at the working face to support the mine roof, and it minimizes the need for dusting mine passages with inert material to prevent coal dust explosions. It involves no blasting and attendant dangers. It also recovers more coal from deeper coalbeds than does room-and-pillar mining. Thus, if longwall mining is not precluded, it will continue to provide greater safety and faster, more controlled, and more quickly mitigated subsidence damage.

(d) Acknowledges existing property rights: The final rule recognizes existing property rights and avoids certain potential compensable takings of property interests. In most cases of severed coal rights, the severance also conveys the property right to undermine the surface, and may include

the right to subside; and any such rights would still limit or burden the surface property rights. We believe failure to allow exercise of these conveyed rights would be inequitable and could risk compensable takings. The final rule allows the holder of such mining and subsidence rights to continue to exercise them, subject to existing SMCRA regulation.

(e) No regulatory gap: Under the final rule, no regulatory gap occurs as a result of section 522(e) not applying to subsidence, because sections 516 and 720 and related SMCRA provisions provide ample authority to regulate surface effects of underground mining under existing regulations. Our regulations implementing sections 516 and 720 provide broad subsidence protection. A prohibition of subsidence within the buffer zones around dwellings, roads, and other surface features listed in section 522(e) would be superfluous. In addition, if there are any environmental values or public interests that warrant additional protection beyond what is currently provided, we have full authority under sections 516 and 720 and other SMCRA provisions, to develop additional regulations to protect such values or interests, without the disruption in the longwall mining industry that would result from applying section 522(e) prohibitions to subsidence.

### **Environmental Effects of the Alternatives**

With the exception of section 522(e)(2) National Forest lands and (e)(3) historic sites, impacts to the protected areas under the prohibitions alternatives would be influenced by the choice of the VER standard. In general, the less restrictive VER alternatives (Ownership and Authority (O&A), Bifurcated (BF), and in some cases Good Faith All Permits or Takings (GFAP/T)) would allow mining that might otherwise be restricted under the PA, PAS, and PAMD prohibitions alternatives. If a more restrictive VER definition were applied (Good Faith All Permits (GFAP), and in some

cases GFAP/T), the protections that are generally envisioned under the PA, PAS, and PAMD prohibitions alternatives would continue to apply to the 522(e) areas.

PDNA Alternative: Under the PDNA Alternative, disturbances from subsidence to protected resources, other than the (e)(5) public parks, are predicted to be consistent under all VER alternatives. For (e)(5) public parks, the GFAP VER alternative restricts the mining of coal resources because operations are unable to install surface facilities (ventilation shafts, roads, mine face-ups, and coal handling areas) within the protected areas. Such a restriction was predicted to result in as much as 45% less acreage disturbed than under the other PDNA alternative combinations. Under the PDNA Alternative, it appears that approximately 3,560 acres of section 522(e)(1) areas would be affected by subsidence over the next 20 years. The current DOI buy-out policy is not triggered by underground activities causing subsidence, under the PDNA Alternative.

The greatest level of impact from this alternative is predicted for 522(e)(5) occupied dwellings. The model predicts that approximately 158,161 acres (29,600 dwellings) would be affected over a 20 year (1995 to 2015) period. While this predicted impact would be partially mitigated through regulatory subsidence control requirements, it does represent a significant amount of disruption to the dwelling owners, families, and communities. It is the same level of impact that is predicted if OSM merely maintained the status quo by choosing the No Action Alternative.

No Action Alternative: The impacts that would result from selection of the No Action Alternative would be essentially the same as the PDNA alternative in combination with the GFAP VER Alternative.

PA, PAS, and PAMD Alternatives: The impacts predicted for these alternatives are influenced by the VER definition in place. If any of these prohibitions alternatives were combined with the



O&A and BF VER definitions, the acres impacted would be essentially the same as under the PDNA Alternative. Applying a more restrictive VER definition would decrease the level of subsidence impact on the protected resources. Under the GFAP/T VER definition, section 522(e)(1) and (e)(5) public parks would still be predicted to be impacted because the model predicts that VER would be granted in many cases. Potential impacts on the 522(e)(1) lands and (e)(5) public parks would be substantially reduced if the GFAP VER definition were applied. Use of the GFAP alternative would also eliminate much of the projected DOI buy-out cost.

The PA, PAS, and PAMD Alternatives, in combination with either the GFAP or GFAP/T VER alternative, would allow occupied dwelling owners to withhold waivers when projected subsidence impacts reached the threshold level. In the absence of a waiver under these alternatives, the prohibition would preclude subsidence impacts on dwellings. It appears that the acres affected under the PA, PAS, and PAMD alternatives would be 7.0%, 5.7%, and 5.4% less (respectively) than those disturbed under alternatives where the prohibitions were not applicable.

In terms of economic effect, the PA, PAS, and PAMD alternatives in combination with the GFAP or GFAP/T alternatives would prevent new eastern longwall mining operations. This effect would begin to occur where dwelling waiver denial rates approached 10%. In summary, if the PA, PAS, or PAMD alternative were selected by the agency and the waiver denial rate were between 2% to 8%, the effect on the economy would likely be a savings of \$5 to \$7.7 million dollars with little or no increase in the cost of coal production. If the waiver denial rate is 10% or greater, the savings to the economy in reduced house and road repair would range from \$15.2 to \$62.4 million over a 20 year period. This savings, however, would be offset for the national economy by at least an additional \$2.6 billion dollars in coal production and transportation costs.

Based upon potential impacts to Section 522(e) acres, the PA standard is the environmentally preferable alternative. The PA standard would minimize impacts to important environmental resources and would give surface owners a greater degree of control over subsidence impacts to the land. However, based upon the statutory, economic, technical, environmental, and other policy considerations discussed in this preamble, OSM has selected the PDNA alternative.

### **Mitigation, Monitoring and Enforcement**

We have adopted all practicable means to avoid or minimize environmental harm from the alternatives selected. Under SMCRA performance standards, impacts to important resources are avoided or mitigated. The performance standards address: topsoils and subsoils, hydrologic balance, explosives, excess spoil, coal mine waste disposal, fish and wildlife, backfilling and grading, revegetation, subsidence, postmining land use, public safety, and exploration.

The primary purposes of SMCRA include: establishing a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations; assuring that the rights of surface landowners and other persons with a legal interest in the land are fully protected from such operations; assuring that surface coal mining operations are not conducted where reclamation required by SMCRA is not feasible; and assuring that surface coal mining operations are conducted so as to protect the environment.

The regulatory structure establishes five levels of protection. These five levels are SMCRA Performance Standards, SMCRA Permitting Process, Bonding, Inspection and Enforcement, and Lands Unsuitable for Mining. These five levels of environmental protection provided by SMCRA

are integral parts of all approved regulatory programs and all have been determined to be no less effective than the Federal regulations. During the operation of a mine, violations would be identified through the inspection and enforcement programs. These routine inspections assure that the operations are in compliance with the conditions of the permit and the performance standards. Should an operator be found out of compliance, a notice of violation would be issued and the operator would be required to abate the violation in a timely manner commensurate with the seriousness of the problem.

SMCRA and the implementing regulations include a variety of subsidence control requirements, which are summarized in this preamble. As amended, SMCRA also requires repair and/or compensation for subsidence damage to occupied dwellings and non-commercial structures and replacement of domestic water supplies that have been adversely affected by underground mining.

This completes the Record of Decision for the proposed revisions to the permanent program regulations implementing section 522(e) of the Surface Mining Control and Reclamation Act of 1977 and proposed rulemaking clarifying the applicability of section 522(e) to subsidence from underground mining.

### **Timing of Agency Action**

The regulations of the Council on Environmental Quality at 40 CFR 1506.10(b)(2) allow an agency engaged in rulemaking under the Administrative Procedure Act to publish a decision on the final rule simultaneous with the publication of the notice of availability of the final EIS. Under section 526(a) of SMCRA, 30 U.S.C. 1276(a), those wishing to challenge the agency's decision may

do so by filing suit in the United States District Court for the District of Columbia within 60 days of the date the final rule is published in the Federal Register.

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### **List of Subjects**

#### **30 CFR Part 761**

Historic preservation, National forests, National parks, National trails system, National wild and scenic rivers system, Surface mining, Underground mining, Wildemess areas, Wildlife refuges.

Dated: September 3, 1999

Sylvia V. Baca /Signed/

Acting Assistant Secretary, Land and Minerals Management

For the reasons given in the preamble, OSM is amending part 761 as set forth below.

### **PART 761--AREAS DESIGNATED BY ACT OF CONGRESS**

1. The authority citation for Part 761 continues to read as follows:

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

2. Section 761.200 is added to read as follows:

**Section 761.200 Interpretative rule related to subsidence due to underground coal mining in areas designated by Act of Congress.**

OSM has adopted the following interpretation of rules promulgated in part 761 .

(a) Interpretation of § 761.11 - Areas where mining is prohibited or limited. Subsidence due to underground coal mining is not included in the definition of surface coal mining operations under § 701(28) of the Act and § 700.5 of this chapter and therefore is not prohibited in areas protected under § 522(e) of the Act.

(b) [Reserved]