

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Parts 701, 784, 817, and 843

RIN 1029-AB69

Permanent Regulatory Program; Underground Mining Permit Application Requirements; Underground Mining Performance Standards

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.
ACTION: Final rule.

SUMMARY: The Office of Surface Mining Reclamation and Enforcement (OSM) of the U.S. Department of the Interior (DOI) is amending the regulations applicable to underground coal mining and control of subsidence-caused damage to lands and structures and certain water supplies, through the adoption of permitting requirements, performance standards, and implementation procedures. The regulations will require all underground coal mining operations conducted after October 24, 1992, to promptly repair or compensate for material damage to non-commercial buildings and occupied residential dwellings and related structures as a result of subsidence due to underground coal mining operations, and to replace drinking, domestic, and residential water supplies which have been adversely affected by underground coal mining operations. The rule will require repair of damage to include rehabilitation, restoration, or replacement of the identified structures, or compensation to the owners in the full amount of the diminution in value resulting from the subsidence. A pre-subsidence survey will be required to document the condition of non-commercial buildings and occupied residential dwellings and related structures subject to subsidence-related damage caused by underground mining activities. The survey will also be required to document the quantity and quality of all drinking and domestic water supplies that could be contaminated, diminished, or interrupted by subsidence. In addition, a permittee will be required to provide, when necessary, an additional performance bond to cover subsidence-related damage that has occurred to protected structures or water supplies.

Within 120 days from the publication of the rule, OSM will, in consultation with the State Regulatory authority, determine for each State with an approved State regulatory program, the

enforcement procedures to ensure prompt compliance with section 720(a) of the Surface Mining Control and Reclamation Act (SMCRA) and the implementing regulations. The performance standards implementing section 720(a) are set forth in 30 CFR §§ 817.41(j) and 817.121(c)(2) and (c)(4). OSM will determine for each such State whether to apply (1) direct interim Federal enforcement of the Energy Policy Act and implementing performance standards, for some or all surface coal mining operations; or (2) the oversight procedures of §§ 843.11 and 843.12(a)(2); or (3) a combination of direct Federal enforcement and State enforcement. As part of the determination process, OSM will consult with each affected State and provide opportunity for public comment. For each State, OSM will publish its determination in the **Federal Register**.

EFFECTIVE DATE: May 1, 1995.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION:

- I. Background.
- II. Discussion of Rule and Response to Public Comments.
- III. Procedural Matters.

I. Background*Energy Policy Act*

The Energy Policy Act of 1992, Pub.L. 102-486, 106 Stat. 2776 (1992) (hereinafter, "the Energy Policy Act") was enacted October 24, 1992. Section 2504 of that Act, 106 Stat. 2776, 3104, amends the Surface Mining Control and Reclamation Act of 1977 (SMCRA), 30 U.S.C. 1201 *et seq.* As noted in the legislative history describing a predecessor to section 2504, the section "provides for greater stability in the surface mining act program by settling controversies over subsidence protection." H.R. Rep. No. 474, 102d Cong., 2d Sess. pt. 8 at 86 (1992). The report also states that "at present, OSM's regulations do not protect coalfield citizens from the types of damages that can occur from land subsidence caused by underground coal mining, either in the form of compensation for, or repair of, damages to homes and other structures as well as replacement of adversely affected water supplies." *Id.*

Section 2504 of the Energy Policy Act added a new section 720 to SMCRA. Section 720(a)(1) requires that all

underground coal mining operations conducted after October 24, 1992, promptly repair or compensate for material damage to non-commercial buildings and occupied residential dwellings and related structures as a result of subsidence due to underground coal mining operations. Repair of damage includes rehabilitation, restoration, or replacement of the structures identified by section 720(a)(1), and compensation must be provided to the owners in the full amount of the diminution in value resulting from the subsidence. Section 720(a)(2) requires prompt replacement of certain identified water supplies which have been adversely affected by underground coal mining operations. Under section 720(b), the Secretary of the Interior is required to promulgate final regulations to implement the provisions of section 720(a) by October 24, 1993.

On September 24, 1993 (58 FR 50174), OSM published a proposed rule to amend the regulations applicable to underground coal mining and control of subsidence-caused damage to lands and structures through the adoption of a number of permitting requirements and performance standards. The regulatory and litigation history of relevant subsidence control issues addressed in this final rule was contained in the preamble to the proposed rulemaking, 58 FR 50175, 50177 (September 24, 1993). In addition to the provisions intended to implement new SMCRA section 720, the proposed rule included other subsidence-related provisions. These additional provisions were developed to address issues raised by commenters' responses to a July 18, 1991 Notice of Inquiry soliciting public comment on existing subsidence regulations. OSM indicated in the proposed rule that it contemplated that the rules implementing SMCRA section 720 would immediately supersede inconsistent state performance standards, and would take effect immediately, applicable to underground mining that occurred after October 24, 1992. OSM anticipated that all other provisions would become effective in the same way as other revisions to the permanent program regulations; i.e., 30 days following of promulgation for Federal program States and on Indian lands, and upon the adoption of counterpart State regulatory program provisions in primacy States.

OSM held public hearings on the proposed subsidence rule in Harrisburg, Pennsylvania, November 8, 1993; Columbus, Ohio, November 9, 1993; Whitesburg, Kentucky, November 16, 1993; Salt Lake City, Utah, November

17, 1993; Washington, DC, November 19, 1993; and Washington, Pennsylvania, November 22, 1993. The comment period for the proposed rule closed on January 24, 1994 (as extended on November 22, 1993, 58 FR 61638). Over 275 commenters submitted comments on the proposed rule.

One commenter initially submitted a petition for rulemaking that requested the Secretary to finalize the rules proposed on September 24, 1993 regarding the regulation of water loss and property damage caused by underground coal mining operations, and until such regulations are promulgated, to impose a moratorium on the issuance of new underground mining permits if such operations would present a high risk of subsidence-related damage. In a subsequent letter, the commenter stipulated that they did not intend the petition to be considered a petition for rule-making as provided in SMCRA section 201(g)(1) *et seq.*

In the course of analyzing the comments received on the proposed rule, OSM discussed subsidence-related issues with coal operators and citizens during an on-site tour of coal fields. As a result, OSM reopened the comment period to allow interested persons time to review additional material which consisted of meeting notes from these discussions and handouts and a video tape received during the field tour. 59 FR 37952-37953 (July 26, 1994). This information was added to the Administrative Record and was also available for review at the OSM offices in Pittsburgh, PA; Denver, CO; Harrisburg, PA; Columbus, OH; Knoxville, TN; and Lexington, KY.

In the **Federal Register** notice to reopen the comment period, OSM took the opportunity to respond to comments received during the initial comment period on the proposed rule, and to requests by States and OSM field offices to clarify the requirement for replacement of water supplies. OSM requested specific comment on an alternative provision to clarify the requirement under sections 717(b) and 720(a)(2) of SMCRA that an operator replace certain types of water supplies. Under the alternative, when the owner confirms in writing that the owner does not desire replacement of the water delivery system, and no such system is needed for either the existing or approved postmining land uses, the permittee may provide replacement of the water supply by demonstrating that an equivalent water source exists that can be developed if desired by future owners. OSM received 26 comments during the comment period which closed on August 25, 1994.

The requirements to repair or compensate for damage to structures, and replace water supplies, were effective upon passage of the Energy Policy Act. Permittees in both primacy States and Federal program States, as well as on Indian lands, are required to comply with these provisions of the Energy Policy Act for their operations conducted after October 24, 1992. In the proposed rulemaking, each regulatory authority was encouraged, pending direct enforcement in a State, to conduct investigations of any complaints alleging violations of the nature covered under new section 720(a). This was intended to ensure that circumstances at a site of alleged violations were observed and documented contemporaneously, and that the documentation would be available for later enforcement action if necessary. OSM conducted investigations of complaints reported to OSM if the State regulatory authority chose not to conduct an investigation. OSM and most State regulatory authorities ensured that complaints were documented and a record of alleged violations was maintained.

Promulgation of final Federal regulations is necessary to enforce the Energy Policy Act requirements to repair or compensate for damages, and replace an adversely affected water supply, due to underground coal operations that occurred after October 24, 1992.

II. Discussion of Final Rule and Response to Public Comments

Section 701.5—Definitions

The following definitions of terms are adopted in the final rulemaking: “drinking, domestic or residential water supply,” “material damage,” “non-commercial building,” “occupied residential dwelling and structures related thereto,” and “replacement of water supply.” The proposed definition of the term “structures or facilities” is not being adopted.

Definition of Drinking, Domestic or Residential Water Supply

The definition for drinking, domestic or residential water supply is being adopted with changes. “Drinking, domestic or residential water supply” would mean water received from a well or spring and any appurtenant delivery system that provides water for direct human consumption or household use. Wells and springs that serve only agricultural, commercial or industrial enterprises are not included except to the extent they also supply water for

drinking, sanitation or other domestic use, for such enterprises.

Several commenters agree with OSM that the definition is needed to implement SMCRA Section 720(a)(2), which requires prompt replacement of certain identified water supplies which have been adversely affected by underground coal mining operations. Commenters also concur with the proposed definition to the extent it excludes water from wells or springs that serve only commercial agricultural or other commercial or industrial enterprises and do not supply drinking water. In response to a recommendation by commenters, OSM recognizes that water pooled in abandoned underground workings could be used as a water supply for drinking, domestic or residential uses, and that it is not uncommon in certain areas for individual residents or communities to obtain their water supply by withdrawing water from such underground workings. In such cases, the underground workings reasonably may be described as equivalent to a well or spring.

A number of commenters argue that inclusion of the appurtenant delivery system in the definition goes beyond the mandate of the Energy Policy Act. OSM concludes that inclusion of the delivery system as part of the water supply is imperative to fulfilling Congressional intent to protect drinking, domestic and residential water supplies. OSM believes that to provide otherwise replacement of water to the user, because delivery is essential to provide a water supply at the point of use or consumption. OSM believes inclusion of the delivery system is therefore necessary to make whole the user of a protected water supply. OSM believes this is what Congress intended.

A significant number of commenters recommend that agricultural water supplies, including water used to keep stock animals, should be protected. OSM believes that the Energy Policy Act mandates protection of water supplies used for drinking, domestic and residential purposes. In implementing this mandate, OSM believes it is reasonable to distinguish commercial agricultural and horticultural uses of water from domestic uses such as non-commercial farming, gardening and other horticultural activities. OSM concludes that the terms “domestic” and “residential” are intended to have broader meaning than merely drinking water for human consumption. Rather, these terms reasonably should be understood to include a full range of domestic uses, including irrigation of

non-commercial gardens and agricultural fields, and use of well and spring water for household purposes other than human consumption. OSM believes it is reasonable to interpret the language of the Energy Policy Act to distinguish private homeowners from commercial and other non-domestic water supply users. Many rural homeowners conduct extensive non-commercial domestic agricultural and horticultural activities, as an integral and even essential part of a homestead. Failure to require replacement of the water supply needed for such domestic agricultural and horticultural uses would fail to make the residential user whole. Therefore, OSM believes this protection reasonably implements the Energy Policy Act.

Definition of Material Damage

The definition of material damage is being adopted as proposed. The term material damage, in the context of §§ 784.20 and 817.121 of this chapter, means any functional impairment of surface lands, features, structures or facilities. The material damage threshold includes any physical change that has a significant adverse impact on the affected land's capability to support any current or reasonably foreseeable uses, or that causes significant loss in production or income, or any significant change in the condition, appearance or utility of any structure or facility from its pre-subsidence condition. It would also include any situation in which an imminent danger to a person would be created.

A number of commenters opposed the definition of material damage as being too broad and subjective. The commenters added that extending the definition to include impairment of surface lands or physical change that adversely impacts the land's capability, goes beyond the requirements of the Energy Policy Act. The commenters claim that the Energy Policy Act does not necessitate that OSM adopt a national definition for material damage especially since there currently is no national definition of this term as it is used in SMCRA. The commenters rely on the history of the term material damage to assert that the reasons that OSM has not defined the term in the past are applicable to implementing the Energy Policy Act. The commenters go on to state that a national definition would lead to needless litigation as the term is applied to a wide variety of circumstances, and the task of defining the term is better left to the individual regulatory authorities, who could define the term in a manner appropriate for their respective jurisdictions. The

commenters argue that the problem with a national definition is further exacerbated by the vague terms used to define material damage. The commenters add that the terms "functional impairment" and "significant adverse impact" do not provide much guidance when applying the definition of material damage to a wide variety of situations and circumstances.

Another group of commenters identify two perceived problems with the proposed definition of material damage. First, the definition fails to explicitly include the loss of value to the land or structures as being material damage. The commenters allege that the Energy Policy Act language supports a "loss of value" component to the definition by providing for repair or compensation "in the full amount of the diminution in value from the subsidence". The commenters note that under the proposed definition, subsidence damage that did not impair the function of a structure but did result in damage that caused the fair market value of the structure to decline, even to the point where the structure could not be sold on the market, would not be considered material damage.

These commenters point out a second perceived problem with the proposed definition. They consider that the use of the qualifier "significantly" in the definition creates too high a threshold of "materiality" and charged that the result is a definition that is contrary to the remedial purposes of SMCRA and the Energy Policy Act. They add that the proposed high threshold of materiality would not allow all of the injured property owners the ability to benefit from the full protection intended by Congress. The commenters also maintain that the rules fail to establish the context in which significant would be defined. The commenters recommend that the term "significantly" be dropped from the definition, and that the definition be clarified to include the loss of value to the land or structures as material damage, and modified to reflect their belief that Congress intended a low threshold for material damage.

OSM has considered these comments, but is not adopting these changes. OSM believes that the final definition of material damage is supported by both SMCRA and the Energy Policy Act. It is both necessary and appropriate to provide an overall policy framework at the national level, within which the state regulatory authorities may continue to make individual determinations of "material damage." It is OSM's conclusion, based on its

experience and its observation and evaluation of regulatory program implementation, that such a national policy framework is needed to confer an appropriate minimum degree of consistency in the determinations made by the regulatory authorities and to ensure a level playing field. The definition of "material damage" covers damage to the surface and to surface features, such as wetlands, streams, and bodies of water, and to structures or facilities. OSM believes the final rule language will still allow each regulatory authority to clarify or more specifically define the term, if appropriate, and to use it in a manner appropriate for subsidence problems in the individual jurisdiction. OSM believes the use of the term "significant" is consistent with the commonly understood meaning of the term "material," as "substantial; noticeable;" or "of importance." See American Heritage Dictionary, Second College Edition. OSM believes this meaning is also consistent with the context in which the term "material damage" is used, both in the Energy Policy Act and in other provisions of SMCRA. OSM believes that if an impact is insignificant, then the regulatory authority could reasonably conclude that the damage is not material. OSM intends that the determination as to the significance of impact should be made on a case-by-case basis, depending on the individual circumstances. Moreover, OSM intends that any damage that causes the value of a structure to decline materially would be covered by the definition, including damage to the condition, appearance, or utility of the structure.

OSM believes this definition strikes a balance that will, on the one hand, provide some additional guidance, while on the other hand ensuring enough flexibility to support OSM's position that determinations as to material damage should be made on a case-by-case basis. Thus, OSM wishes to emphasize that it is the responsibility of the regulatory authority to make specific determinations on a case-by-case basis as to what would constitute material damage under its regulatory program, consistent with the final definition in paragraph 701.5. This will ensure that the term is applied appropriately to the subsidence problems in each jurisdiction.

Definition of Non-Commercial Building

The definition of the term "non-commercial building" is being adopted as proposed with minor changes. A non-commercial building would mean any building, other than an occupied residential dwelling, that, at the time

the subsidence occurs, is used on a regular or temporary basis as a public building or community or institutional building as those terms are defined in § 761.5 of this chapter. Buildings used only for commercial agricultural, industrial, retail or other commercial enterprises are excluded.

A number of commenters agree that the definitions for "non-commercial buildings" and "occupied residential dwelling and structures related thereto" are needed to implement section 2504 of the Energy Policy Act, which requires all underground coal mining operations to promptly repair or compensate for material damage to non-commercial buildings and occupied residential dwellings or related structures as a result of subsidence due to underground mining operations.

In response to a commenter, OSM has revised the proposal to clarify that "commercial" agricultural enterprises are excluded. The definition specifically provides that buildings used only for commercial agricultural and other commercial use are not covered in the definition of "non-commercial" building. Further, the definition requires that the non-commercial use of a building exist on a regular or temporary basis at the time subsidence damage occurs.

Definition of Occupied Residential Dwelling and Related Structures

This provision as proposed defined the term "occupied residential dwelling and related structures" as any building or other structure that, at the time subsidence occurs, is used for human habitation. This definition in the final rule is revised by adding the phrase "temporarily, occasionally, seasonally, or permanently" used for human habitation.

OSM agrees with the commenters that the definition of an "occupied residential dwelling and structures related thereto" should be revised to protect dwellings that are not occupied on a daily basis but are occupied at some time. This change is intended to recognize that dwellings such as rental homes, seasonal homes, and camping cabins are entitled to protection. This term also would include any building, structure, or facility installed on, above, or below, or a combination thereof, the land surface if that building, structure, or facility is adjunct to or used in connection with the occupied dwelling, including non-commercial agricultural and horticultural activities. Examples of such structures include, but are not limited to, garages; storage sheds and barns; greenhouses and related buildings; utilities and cables serving

the dwelling; fences and other enclosures; retaining walls; paved or improved patios, walks and driveways; septic sewage treatment facilities; and lot drainage and lawn and garden irrigation systems. Any structure used only for commercial agricultural, industrial, retail, or other commercial purposes would be excluded.

OSM recognizes that a similar term "occupied dwelling" is currently defined in 30 CFR 761.5 as "any building that is currently being used on a regular or temporary basis for human habitation." This term is so defined for purposes of Part 761, which implements SMCRA § 522(e)(5), and which, with certain exceptions, does not allow surface coal mining operations to be conducted within 300 feet of any "occupied dwelling." OSM has adopted a somewhat different definition for the term "occupied residential dwelling" for purposes of implementing the Energy Policy Act provisions concerning subsidence control, because of the different purposes served by the definitions and the different language of the Energy Policy Act.

A group of commenters suggest that the definition is overly broad and should be limited to the intentions of Congress found in the Energy Policy Act which were meant to protect only residences and their water supplies. OSM disagrees with the commenters' characterization of congressional intent. OSM maintains that the definition for "occupied residential dwelling and structures related thereto" is needed to implement Section 2504 of the Energy Policy Act of 1992, which requires all underground coal mining operations to promptly repair or compensate for material damage to non-commercial buildings and occupied residential dwellings and related structures as a result of subsidence due to underground mining operations.

Definition of Structures or Facilities

In the proposed rule, OSM defined structures and facilities as any building, constructed object or improvement whether installed on, above, or below the land surface, including, but not limited to, park facilities; roads; cemeteries; utilities; fences and other enclosures; retaining walls; and septic sewage treatment, irrigation and drainage systems.

Commenters argue that the Energy Policy Act does not specifically address commercial and certain other non-commercial structures. In addition, the commenters note that there is no need for the expanded definition because current regulations already provide for

adequate protection of buildings and structures from underground mining.

One commenter noted that a broad definition of the term "structures or facilities" is supported by the House Committee Report accompanying the House revisions to the Energy Policy Act:

It is the Committee's intent that the terms "structure or facility" be construed to extend to any improvement on or in the land, such as houses; buildings; gas, water, sewage or other pipelines; telephone, electric and other cables; and water impoundments. H.R. Rep. No. 474, 102d Cong. 1st Sess., pt. 8, at 133 (1992).

However, this report accompanied a previous version of the Energy Policy Act, which was not passed. And that earlier version, unlike the Energy Policy Act, did not require that OSM prepare a study to evaluate existing subsidence protections of pipelines, before any decision on rulemakings to make changes in protection of pipelines. Therefore, OSM believes that the quoted language is not dispositive as to Congress' intent on interpretation of the term.

OSM considered all comments on the proposed definition, and reevaluated its position on this provision. OSM agrees with those commenters who argue that section 2504 of the Energy Policy Act did not mandate protection of structures and facilities beyond those specifically noted in section 2504 of the Energy Policy Act, and OSM has concluded that the record does not clearly establish that a nation-wide problem exists requiring further subsidence protection of structures and facilities not specifically mentioned in section 2504. Therefore, OSM has decided to address in this rulemaking only those structures addressed in the Energy Policy Act. Therefore OSM is withdrawing the proposed definition and performance standards concerning the term "structures and facilities."

A number of commenters urge that OSM take various steps in this rulemaking to clarify or change existing subsidence control requirements concerning protection of natural gas and petroleum pipelines. Other commenters request that OSM confirm in this rulemaking the applicability of existing rules to such pipelines. However, OSM has concluded that any actions in this rulemaking to clarify, change or otherwise evaluate existing subsidence control requirements for protection of such pipelines would be premature and contrary to Congressional intent as expressed in the Energy Policy Act of 1992. That act provided, in section 2504(a)(2), that:

(A) The Secretary of the Interior shall review existing requirements related to underground coal mine subsidence and natural gas and petroleum pipeline safety. Such review shall consider the following with respect to subsidence: notification; mitigation; coordination; * * * and the status of Federal, State and local laws, as well as common law, with respect to prevention or mitigation of damage from subsidence.

(B) The review shall also include a survey of the status of Federal, State, and local laws, with respect to the responsibilities of the relevant parties for costs resulting from damage due to subsidence or from mitigation efforts undertaken to prevent damage from subsidence.

(C) In conducting the review, the Secretary * * * shall consult with * * * the Attorney General of the United States, appropriate officials of relevant States, and owners and representatives of natural gas and petroleum pipeline companies and coal companies.

Subsection (2)(D) requires the Secretary to submit a report detailing the results of the review to specified Congressional committees. Subsection (2)(D) also provides that:

Where appropriate, the Secretary of the Interior shall commence a rulemaking to address any deficiencies in existing law determined in the review under subparagraph (A) regarding notification, coordination and mitigation.

Thus, Congress directed that OSM review and report on the status of existing Federal law and consult with the Attorney General in that review, and, where appropriate, commence a rulemaking to address any deficiencies identified in the review. OSM believes it would be premature to summarize the status of existing law or clarify or revise existing law, before the mandated review and report are finished. OSM is currently in the process of completing the report. Therefore, in this rulemaking OSM will not address the status of existing law protecting natural gas and petroleum pipelines from subsidence. Similarly, OSM will not clarify or change existing law, except that, as discussed elsewhere in this rulemaking, OSM is interpreting section 720 to require that individual pipeline connectors attached to structures otherwise protected under section 720 are subject to the protections of section 720. OSM has concluded that this limited protection is necessary to ensure that owners of otherwise protected structures are made whole when material damage occurs. Any action appropriate to clarify or revise the

application of subsidence performance standards to natural gas and petroleum pipelines will be taken after completion and distribution of the review and report.

Definition of Replacement of Water Supply

The definition of the term "replacement of water supply" is being adopted as proposed with additional changes. In the final rule, "replacement of water supply" means, with respect to protected water supplies contaminated, diminished, or interrupted by coal mining operations, the provision of a water supply on both a temporary and permanent basis, which is equivalent to the premining quantity and quality. Replacement includes provision of an equivalent water delivery system and payment of operation and maintenance costs in excess of customary and reasonable delivery costs for the premining water supply. The definition is applicable to both underground coal mining operations and surface mining operations that affect water supplies. The final rule is intended to apply to replacement of water supply under both sections 717(b) and 720(a)(2) of SMCRA.

Several commenters assert that the proposed requirement that the permittee pay for the operation and maintenance costs of the replacement water supply goes beyond the statutory requirements of the Energy Policy Act which only requires the "replacement" of the water supply. OSM does not agree. OSM maintains that payment of replacement water supply operation and maintenance costs in excess of premining costs is a logical aspect of the requirement to replace the water supply. This provision would ensure that the owner or user of the water supply is made whole, and that no additional costs are passed on to the water supply user after the replacement water supply is installed, beyond those that are customary and reasonable for the premining supply. The definition contemplates that the permittee will pay the capital costs of installing the replacement water supply. For example, if the use of well water can continue, the permittee would pay the cost of designing, drilling, and completing a new or deeper well; purchasing and installing a pump; and/or purchasing and installing a treatment system, as necessary. If the replacement water supply involves a hook-up to a public or private water supply system, the permittee would pay the hook-up costs, including fees, purchase of equipment and supplies, and construction. If a temporary water supply is necessary before the permanent replacement water

supply is provided, the permittee would pay the cost of providing the temporary water supply.

A number of commenters support the requirement for the payment of operation and maintenance costs in excess of the customary and reasonable costs for the delivery of the premining water supply. However, the commenters suggested OSM consider a lump sum payment as an alternative to annual payments for operation and maintenance costs for a permanent water supply. OSM has considered the commenters' views and has decided to adopt most of these suggestions. If agreed to by the water supply owner, a one-time payment based on the present worth of the increased annual operating costs for a period of time agreed upon by the water supply owner and the permittee would be considered an acceptable method to fulfill the obligation to pay for the operation and maintenance costs of a permanent water supply in excess of customary and reasonable premining costs. A lump sum payment may be preferable to annual or other periodic payments because only one transaction is needed. Annual payment is not assured if the permittee encounters financial difficulties or goes out of business. Periodic payments could involve complex calculations and excessive and unproductive paperwork and record-keeping. Provision for a lump sum payment should reflect the predicted useful life of a water supply delivery system. For example, 20 years could be a reasonable amount of time to hold a permittee responsible for costs when the delivery system from a spring or well would likely have required repairs within the 20-year period even if the spring or well had not been affected by mining.

Commenters argue that the definition should state that the replacement water supply need only provide the quantity and quality required for actual use. In addition, the commenters recommend that the phrase "provision of an equivalent water delivery system" be deleted because the proposed definition appears to limit replacement to water delivery systems. Under this condition the permittee would not be able to replace the water supply by any means other than a "water delivery system." OSM maintains that the provision of water quality and quantity equivalent to that of premining supplies is plainly required by the term "replacement." Replacement of the delivery system is a reasonable aspect of replacement. The requirement of replacement of water supply includes replacement at no significant cost to the water supply

owner above that which was being paid by the owner for water supply prior to the damage. The obligation of the Energy Policy Act is to replace the supply, as noted in the legislative history. OSM believes that to require that the water supply owner be made whole without imposing significant additional costs will most reasonably implement the Energy Policy Act.

A commenter recommends that the definition of "replacement" address time limits for providing both interim replacement and permanent replacement. The commenter recommends a 48-hour time period to provide a temporary replacement and 1–2 years to provide permanent replacement. OSM agrees that some guidance on the issue of timing of water supply replacement would aid in consistent implementation of replacement requirements. If a temporary water supply is needed before the permanent replacement water supply is provided, it is reasonable to expect that the permittee will provide replacement within a reasonable amount of time. OSM believes that prompt replacement should typically provide: emergency replacement, temporary replacement, and permanent replacement of a water supply. Upon notification that a user's water supply was adversely impacted by mining, the permittee should reasonably provide drinking water to the user within 48 hours of such notification. Within two weeks of notification, the permittee should have the user hooked up to a temporary water supply. The temporary water supply should be connected to the existing plumbing, if any, and allow the user to conduct all normal domestic usage such as drinking, cooking, bathing, and washing. Within two years of notification, the permittee should connect the user to a satisfactory permanent water supply. This guidance is intended to assist regulatory authorities in deciding if water supplies have been "promptly" replaced.

A commenter expresses concern that adoption of the provision to require both underground mining operations and surface mining operations to replace water supplies would violate the Administrative Procedure Act (APA). The commenter charges that surface mine operators were not given adequate notice and opportunity to comment on the proposed provision. OSM disagrees. The proposed definition was explicitly applicable to surface mining (See 58 FR 50178, September 24, 1993), and the proposed rule invited all interested parties to submit comments on the provision.

A commenter notes that the definition does not address the doctrine of prior appropriation and state law regarding the replacement of water rights and requested that the definition include a reference to state law. OSM has concluded that no such discussion is required in this definition. As discussed in more detail below in the preamble discussion of section 817.42(j), neither this definition nor the requirement to replace drinking, domestic, and residential water supplies are intended to affect rights to consume or legitimately use a water supply under a senior water right pursuant to State law.

Commenters argue that it would be inappropriate to require replacement of a water supply that is not needed for the approved postmining land use. In addition, OSM received requests from States and OSM field offices to clarify the requirement for replacement of water supplies. In response to these comments, OSM considered an alternative provision for replacement of water supplies. In the July 26, 1994, notice reopening the public comment period on the proposed rule to provide for review and comment on additional information added to the Administrative Record, OSM requested comments on the proposed alternative provision for water supply replacement (59 FR 37953). This provision provides that when the property owner confirms in writing that the owner does not desire replacement of the delivery system, and no such system is in use at the time of loss, contamination, or interruption, and no such system is needed for the approved postmining land uses, then the permittee may provide replacement of the water supply by demonstrating that an equivalent water source exists that can be developed if desired by future owners. Under this provision an owner could forgo replacement of the water delivery system if the system is not needed for maintenance of the existing land use or attainment of the postmining land use. The permittee would still be required to demonstrate the availability of a water source equivalent to premining quantity and quality, so that the current owner or his or her successor could utilize the water if desired in the future. Where the spring or well also serves other purposes, the quantity of the replacement supply only needs to be equivalent to the premining water supply for drinking, domestic, or residential use.

The majority of commenters support OSM's effort to reduce unnecessary, useless, and burdensome expenses for water replacement. Other commenters characterize the proposed provision as

inconsistent with the Energy Policy Act requirement to replace the affected water supply, and assert that there is no authority to waive water replacement, in the absence of explicit statutory authorization of waiver. These commenters allege that the permittee is obliged to replace the water supply, including the delivery system, at no additional cost to the owner. The commenters alleged that the proposed provision would extinguish the replacement rights of tenants, fails to protect the reasonably foreseeable uses and values of property, and fails to ensure implementation of hydrological protection provisions of SMCRA.

OSM does not agree that this provision would fail to ensure implementation of the hydrologic protection requirements of sections 816.41 and 817.41. Existing requirements remain in place, and the permittee must comply with them. OSM expects that any water rights of tenants vis-a-vis a landlord may properly be protected under the terms of the applicable lease for the property. OSM also does not agree that this provision will fail to protect the reasonably foreseeable uses and values of the property, since any decision to forego construction of a delivery system must be consistent with the postmining land use, and the permittee is still required to ensure that a water source equivalent to premining quality and quantity is available.

OSM has decided to adopt the provision outlined in the **Federal Register** notice reopening the comment period on the proposed rule. Thus, the owner would have the option of foregoing installation of a delivery system, in those circumstances in which the system would be neither wanted or needed, and would not be used if installed. This provision would ensure that all coal mining operations must be conducted so that water resources remain to support the existing and proposed use of the land. The only feature that may be waived is a water delivery system that would not be used for the postmining land use, and was not needed for the land use that existed before mining. Also, the permittee must demonstrate the availability of a water source equivalent to premining quality and quantity. Therefore, OSM believes that the final rule ensures compliance with the Energy Policy Act and section 717 of SMCRA in all essential respects, while avoiding unneeded expense.

Section 784.10—Information Collection

OSM is revising Section 784.10 which contains the information collection requirements for Part 784 and the Office

of Management and Budget (OMB) clearance number. The revision updates the data contained in the section by including the estimated reporting burden per respondent for complying with the information collection requirements.

The collections of information contained in Part 784 have been approved by Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0039. The information will be used to meet the requirements of 30 U.S.C. 1211(b), 1251, 1257, 1258, 1266, and 1309a. The obligation to respond is required to obtain a benefit.

Several commenters asserted that the public reporting burden for the requirements proposed for Part 784 is far greater than that estimated by OSM. They believe that OSM has miscalculated the differences between existing regulations and the proposed regulations, and underestimated the burden on industry to complete the hydrologic information, the pre-subsidence survey and the subsidence control plan.

Based on the comments received, OSM has recalculated the estimated burden hours required to comply with the new requirements. Specifically, commenters claimed that the new requirements of section 784.14 would increase the hydrologic monitoring burden placed on industry. Accordingly, OSM has modified the burden estimate to include the new requirements for section 784.14.

Several commenters also disagreed with OSM's burden estimates to complete the requirements of section 784.20. The expanded requirements include preparation of a pre-subsidence survey which entails preparing a map, a narrative, and a survey, and a subsidence control plan.

Only three commenters submitted comments which contained data on burden hours or the number of structures involved in a pre-subsidence survey. One commenter, a coal company, provided a per structure burden hour, ranging from 3.33-4 hours per structure. The same commenter stated that a recent permit revision submittal for a 5,000 acre permit in a rural area contained 300 structures which, if the new requirements were in place, would have required a pre-subsidence survey taking approximately 1,000+ hours to conduct. One commenter, a major trade association for the coal industry, stated that in the Appalachian region where over 90 percent of all producing underground coal mines are located, between 6 to 12 structures per permit would require a

pre-subsidence survey. Another commenter stated that a recent pre-mining survey in Appalachia had required a total of 300 man-hours; however, the commenter did not provide data on the number of structures involved.

Using the data supplied by commenters, OSM has recalculated the estimated *average* burden hours for a pre-subsidence survey at 163.20 hours per permit (12 structures \times 4 hours \times 90%+300 structures \times 4 hours \times 10%=163.20 hours). This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. OSM considers this to be a very conservative estimate. OSM is required under the Paperwork Reduction Act to renew its information collection clearance every three years. As part of that process, OSM publishes a notice in the **Federal Register** requesting comments on the estimated burden hours. At the first renewal of the clearance, OSM will be able to refine this estimate for pre-subsidence surveys, based on factual information concerning coal industry compliance with the new requirement. The total information collection burden for Part 784, the burden for the pre-subsidence survey and all other requirements, is estimated at 513 hours. This is the time required for a respondent to comply with all of the reporting requirements in Part 784.

Section 784.14(e)(3)(iv)—Hydrologic Information

This provision was proposed as 784.14(e)(3)(v), and has been adopted with some modification in the final rule. Under the final rule, the permit applicant will be required to identify whether the underground mining activities conducted after October 24, 1992, may result in contamination, diminution or interruption of a well or spring which is in existence at the time the permit application is submitted and which is used for domestic, drinking, or residential use within the proposed permit or adjacent areas. Authority for the new requirement may be found in SMCRA sections 201(b)(2), 507(b)(11), 508(a)(13), and 720(b). These sections authorize the imposition of requirements to submit information needed to implement the performance standard in paragraph 817.41(j).

Several commenters object to the proposed requirement that an assessment of probable hydrologic consequences be done for agricultural and industrial water supplies in permit or adjacent areas, noting that SMCRA

does not authorize the replacement of water supplies for these uses. Consequently, these commenters believe that a requirement that the PHC determination include any assessment of the potential effect of mining on these supplies is inappropriate. OSM has decided to require replacement only of those types of water supplies specified in the Energy Policy Act, and has decided to withdraw the provision which was published as proposed paragraph 784.14(e)(3)(iv), and which would have established a broader information requirement for water supplies than is required to implement the Energy Policy Act.

Several commenters assert that the probable hydrologic consequences regulations duplicate much of the existing requirements for hydrologic impact assessments as currently required in SMCRA. In addition, the commenters noted that State regulatory agencies already have authority in paragraph 784.14(e)(3) that allows State agencies to require any information they deem necessary to ensure enforcement of the regulations and effective implementation of SMCRA. The commenters maintained that the proposed rules would generate significant inconsistencies which will result in total confusion for both the State regulatory agency and the coal mining community.

The requirement at 784.14(e)(3)(iv) does not duplicate the existing authority in paragraph 784.14; rather, the requirement in paragraph (e)(3)(iv) adds certain wells and springs to the existing list under 784.14(e)(3) of features to be covered in a determination of probable hydrologic consequences. This requirement implements the parallel performance standards at 817.41. Paragraph (e)(3)(iv) ensures that the requirements of 784.14(e)(3) apply to certain wells and springs within the proposed permit area or adjacent area. The requirement would 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.

A commenter alleged that the background data to determine the flow of water, either from a well or a spring, should be normalized for historic parameters to account for extended drought conditions. The commenter went on to note that replacing water at levels measured during dry conditions results in replacement at diminished levels.

OSM understands that certain wells and springs may pose problems for sampling to determine water replacement levels. However, OSM believes that the current regulations implementing those requirements, at 784.14(b) (1) and (2), are adequate to determine the level of a water supply equivalent to the premining water supply and to determine the presence of heavy metals in the water. 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, the requirement to include an analysis of both suspended and dissolved constituents provides adequate information to determine the presence of heavy metals in the water supply. Moreover, throughout the application process, the regulatory authority may require additional information necessary to assure that the proposed operation will protect the hydrologic balance, or otherwise necessary to understand the potential impacts of the operation.

One commenter characterized the requirement for baseline information for the permit and adjacent areas as flawed because many States do not consider lands overlying underground workings to be within either the permit area or the adjacent area. Therefore, many wells above or close to underground workings would not be surveyed and there would not exist any baseline against which to measure future damage and build an enforceable case for replacement of water rights.

OSM does not agree with this characterization. The term "adjacent area," as defined in 30 CFR 701.5, specifically includes all areas outside the permit area where resources, including wells or springs, could reasonably be expected to be adversely impacted by the proposed mining operation, including probable impacts from underground workings. The 1979 version of this definition similarly included all lands containing potentially affected protected resources outside the permit area. All State programs must contain provisions no less effective than the Federal regulations. OSM is not aware of any State that has a deficient definition of "adjacent area" or its equivalent. Nor is OSM aware of any State that is interpreting its program in the manner alleged by the commenter. Therefore, OSM finds no basis for the commenter's concern.

A commenter expressed concerns as to how an existing operation could demonstrate that it has not adversely

impacted a well or spring that serves a water supply, when drought, rather than underground mining, is the primary factor affecting a water supply. The commenter noted that an existing operation would not have prepared a presubsidence survey to establish baseline water conditions. OSM believes such questions are evidentiary issues that must be addressed reasonably on the facts of the individual case, just as such issues are now addressed for replacement of water supplies affected by surface mining. As noted elsewhere in this preamble, a permittee may also voluntarily provide a presubsidence survey.

Section 784.20(a)—Pre-subsidence Survey

This section as proposed would add a paragraph to § 784.20(a), entitled "Pre-subsidence Survey." In response to comments and requests for clarification concerning the scope of the rulemaking and of this paragraph, the proposed requirement is being adopted with modifications in this final rule. The rule language has been revised to provide that each application include a map of the proposed permit area and adjacent area at a scale of 1:12,000 or a larger scale if determined necessary by the regulatory authority. The map would show 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 be diminished by subsidence. The maps would also be required to 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.

A narrative is required that must indicate whether subsidence, if it occurred, could cause material damage or diminish the reasonably foreseeable use of the identified structures and renewable resource lands. The narrative is also required to indicate whether subsidence, if it occurred, could contaminate, diminish, or interrupt the identified drinking, domestic, or residential water supplies. In addition to the conventional text format, videos or photographs can be submitted as supplements to the narrative.

Unless the applicant was denied access for such purposes by the owner, the rule also requires a survey which identifies certain features. First, the survey must identify the condition of all non-commercial buildings or occupied residential dwellings and related structures that may be diminished by

subsidence within the area encompassed by the applicable angle of draw. Second, the 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. In addition, the applicant would be required to notify the owner in writing that denial of access would remove the rebuttable presumption that subsidence from the operation caused any postmining damage to protected structures that occurred within the surface area that corresponds to the angle of draw for the operation. (See discussion of angle of draw in discussion of paragraph 817.121(c)(4), *infra*.) Any technical assessment or engineering evaluations used in determining the pre-mining condition or value of such structures or in determining the premining quantity and quality of protected water supplies would be conducted at the permit applicant's expense. Copies of the survey and any technical assessments or engineering evaluations must be provided by the applicant to the property owner and regulatory authority.

Commenters claim that OSM failed to justify the need for a second map, in addition to the map required by paragraph 783.24(c). The map requirements of paragraph 784.20(a)(1) could be met by the same map submitted to comply with paragraph 783.24(c), so long as it meets the requirements of this paragraph. OSM believes that an explicit requirement to establish and document the location and pre-mining condition of protected structures and lands, and the location and pre-mining quantity and quality of protected water supplies, is essential to establish a sufficient baseline against which the effects of subsidence may be measured and to ensure full implementation of SMCRA sections 516 and 720.

The commenters argue that OSM provided no justification for a standard, nationwide map scale and suggest that the determination of the map's scale be left to the individual states, based on mining conditions in each state. Commenters claim that OSM gave no reason why the map scale should be 1:4,800. A commenter pointed out that a map of the mine operation and the affected area at a scale of 1:4,800, as proposed, could be on the order of 7'×10'. OSM agrees that a map of this size would be difficult to review and store. OSM has revised the proposed rule to allow for a map on a scale of 1:12,000, or 1"=1000'. If the regulatory

authority determines that more detail is needed, for example to show where protected structures or water supplies are located, the regulatory authority may request a larger-scale map. The final map scale requirement will provide both the regulatory authority and permittee with greater flexibility in meeting the requirement.

Commenters state that the requirement that maps must include a narrative description of the hydrologic information is redundant. Commenters allege that a narrative description would not provide any additional information that is useful, since paragraph 784.20 already requires both a map and narrative description. OSM agrees and has modified the rule. The map and narrative required under final sections 784.20(a)(1) and (2) are not intended to expand on the existing responsibility to identify renewable resource lands and identify whether they may be impacted by subsidence. The changes in this provision concerning map and narrative requirements for water supplies protected under section 817.41(j) are intended to provide the information necessary to ensure full implementation of the requirements of SMCRA section 720, concerning protection of water supplies. The changes reflect revisions made to paragraphs 784.20(b), 817.41(j), and 817.121(c). OSM anticipates that the regulatory authority may allow the relevant portions or all of the narrative prepared for the survey, in the subsidence control plan if the later narrative would be redundant.

Several commenters assert that the requirements in the proposed rule governing pre-subsidence surveys would pose a costly burden on permittees if the requirements are interpreted to require identification and cataloging of the entire land surface and everything on it for the presubsidence survey. Commenters allege this burden is especially likely, considering the broad definition of structures and facilities, and commenters strongly disagree with OSM's assertion in the proposed rule preamble, that the additional survey would impose "little" additional burden on the industry. They also argue that such surveys have a diminishing usefulness as mining plans proceed, since the permit applications in which the survey is to be included are often done years in advance of any actual mining. Commenters also consider the proposed requirement redundant because of the existing survey requirements.

OSM has considered these comments and has modified the final rule. OSM

continues to believe that additional requirements are necessary to effectively implement the requirements of the Energy Policy Act and is limiting the final requirement to non-commercial buildings, occupied residential dwellings and related structures, and drinking, domestic, or residential water supplies. As noted above, OSM has also made conforming changes to the requirements in paragraph (a) for a presubsidence map and narrative covering protected features. The regulatory authority, the permittee, and the surface owner will be provided with a better record of the status of these protected features prior to mining. That record will better form the basis of enforcement in the event of subsidence; but it will also better protect the permittee against any claim of damage for which the permittee is not responsible.

Further, OSM believes that these proposed changes will impose no unreasonable burden on the industry. In providing information on these features, the survey should incorporate the baseline water quality and quantity information on existing water supplies required under existing rules at 30 CFR 784.14 and 784.22. This information is also referenced in the final rule provision concerning water supply replacement requirements for underground mining, section 817.41(j). While the commenters may have pointed out a limitation on the long-term usefulness of the information, based on OSM's experience OSM believes that the proposed format for the survey information is the minimum needed to adequately assess the need for a subsidence control plan. OSM notes that the regulatory authority may ask for an update of this information as part of the mid-term permit review process, which would mitigate any problems with outdated information. If a subsidence control plan is needed, information in the presubsidence survey may be incorporated in the subsidence control plan.

Some commenters have noted that the decision as to whether to impose a pre-subsidence survey has been held by the courts to be a matter within the sound discretion of the Secretary, *NWF v. Lujan, supra*, 733 F.Supp. 419 at 429; and is essential to effectuate the protections intended to be afforded by amended Sections 720(a)(1) and (b) of the Act. OSM agrees.

Other commenters characterize this case as rejecting a requirement that an additional survey be done before mining is commenced. OSM does not agree with this characterization. The cited case found that the Act does not speak

to the issue of presubsidence surveys, so the matter is within the Secretary's discretion. The court upheld a decision by the Secretary not to adopt certain requirements for a presubsidence survey.

Paragraph 784.20(b)—Subsidence Control Plan

This final rule is modified from the proposal to correspond with the final revisions to paragraphs 817.41(j) and 817.121(a)(2). Otherwise, the requirements under paragraph 784.20(b) in the final rule are the same as proposed. Under the final rule, no further information need be provided in the application under this section if the results of the pre-subsidence survey meet the following criteria:

- (1) no structures, facilities, or renewable resource lands exist, or
- (2) no material damage or diminution in value or foreseeable use could occur, as a result of mine subsidence, and
- (3) the regulatory authority agrees with such conclusion.

A subsidence control plan is required if the survey identifies structures, facilities, or renewable resource lands and shows that subsidence could cause material damage or diminution in value or reasonably foreseeable use, or if the regulatory authority determines that such damage or diminution could occur.

Under the final rule, paragraph 784.20(b), would require each subsidence control plan to contain the following information: (1) a description of the method of coal removal, such as longwall mining, room-and-pillar removal or hydraulic mining, or other extraction methods, including the size, sequence and timing for the development of underground workings; (2) a map of the proposed underground workings that describes the location and extent of the areas in which planned-subsidence mining methods will be used and that identifies all areas where the measures described in paragraphs (b)(4), (b)(5), and (b)(7) of this section will be taken to prevent or minimize subsidence and subsidence-related damage; and when applicable, to correct subsidence-related material damage; (3) a description of the physical conditions, such as depth of cover, seam thickness, and lithology of the overlying strata, which affect the likelihood or extent of subsidence and subsidence-related damage; (4) a description of the monitoring, if any, needed to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce, or correct material damage in accordance with paragraph 817.121 of this chapter; (5) except for those areas

where planned subsidence is projected to be used, a detailed description of the subsidence control measures that will be taken to prevent or minimize subsidence and subsidence-related damage, such as, but not limited to: backstowing or backfilling of voids; leaving support pillars of coal; leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving coal in place; and taking measures on the surface to prevent or minimize material damage or diminution in value of the surface; (6) a description of the anticipated effects of planned subsidence, if any; (7) for those areas where planned subsidence is projected to be used, a description of methods to be employed to minimize damage from planned subsidence to non-commercial buildings and occupied residential dwellings and related structures; or the written consent of the owner of the structure or facility that minimization measures not be taken; or, unless the anticipated damage would constitute a threat to health or safety, a demonstration that the costs of minimizing damage exceed the anticipated costs of repair; (8) a description of the measures to be taken in accordance with §§ 817.41(j) and 817.121(c) of this chapter to replace adversely affected protected water supplies or to mitigate or remedy any subsidence-related material damage to the land and protected structures; and (9) other information specified by the regulatory authority as necessary to demonstrate that the operation will be conducted in accordance with § 817.121 of this chapter.

In this preamble OSM will use "longwall mining" to refer to the longwall mining and pillar recovery technologies which provide for "planned subsidence in a predictable and controlled manner," as referenced in SMCRA section 516(b)(1). The text of the regulations as adopted continues to use the terms "mining technology which provides for planned subsidence in a predictable and controlled manner" or "planned-subsidence mining methods."

Several commenters support the proposal to require permittees to submit subsidence control plans. These commenters recommend that the subsidence control plan require the permittee to document the full range of steps that can be taken to prevent and mitigate subsidence impacts, including mine design changes and precautionary and preventive measures taken above ground to minimize damage to surface features and structures.

However, some commenters argue that amending paragraph 784.20(b)(5) to require longwall mining to minimize material damage illegally reverses the current regulations of SMCRA, since the Energy Policy Act does not require the change and OSM has not shown a compelling need for such a change. These commenters find no reason to support OSM's decision to reverse the regulatory provisions governing longwall mining. They argue that there are sound policy and technical reasons for supporting the current regulatory scheme and that the proposed rule would incur additional costs on those permittees who utilize the longwall mining technique. OSM believes these requirements are fully authorized under SMCRA sections 201 and 516 and are consistent with and supportive of the requirements of SMCRA section 720. OSM does not agree that this provision is inconsistent with SMCRA or the Energy Policy Act. As discussed *infra*, in response to comments concerning the scope of the requirement, OSM has revised this provision somewhat, to require that, with certain limitations, minimization measures must be taken to protect the same structures for which, in section 720 of SMCRA, Congress has imposed a requirement to repair or compensate for damage. This will ensure that permittees take reasonable steps to minimize subsidence damage to protected structures before it occurs, without incurring unreasonable costs. While OSM recognizes that there will be some additional costs associated with minimization measures, OSM believes it is sound public policy to limit damage to protected structures before it occurs, where reasonable, and that such requirements are fully consistent with SMCRA, as amended. OSM also expects that the limitations on the obligation to minimize, discussed *infra*, will ensure that the expense of minimization will be neither prohibitive nor disproportionate.

One commenter submitted that the proposed regulations would impose an absolute requirement for a subsidence control plan because no one conducting longwall operations on federal lands would ever be able to demonstrate that there would be no "diminution in value." OSM believes that the extent to which longwall operations must prepare pre-subsidence surveys can only be determined on a site-specific basis, because of the number of variables that may affect both the nature and extent of subsidence as well as the damage to any protected structures. The commenter noted that the permittee could not meet the requirement for the subsidence

control plan under the existing regulatory framework imposed by the Bureau of Land Management, which requires maximum economic recovery. OSM believes that any requirement to extract minerals for maximum economic recovery by definition must be applied to mean maximum economic recovery *consistent with applicable regulatory requirements*.

Under the final rule, OSM is retaining the language under existing paragraph 784.20(b)(5) that provides an exception to the requirement to submit a detailed description of the measures to be taken on the surface to prevent or minimize material damage or diminution in value of the surface for those areas where planned subsidence is projected to be used.

However, OSM has added paragraph 784.20(b)(7) that requires permittees conducting longwall mining operations that result in planned and controlled subsidence to describe the subsidence control measures they will use to minimize subsidence and subsidence-related material damage to non-commercial buildings and occupied residential dwellings and related structures, or to demonstrate that the costs of minimizing damage to these structures exceed the anticipated cost of repair and are not needed to prevent a threat to health or safety. The proposed rule would have required a description of such measures under paragraph 784.20(b)(5)(iv). The subsidence control measures that a longwall permittee can employ to minimize subsidence and subsidence-related material damage include measures taken on the surface, such as trenching, bracing, and jacking structures. OSM does not intend to require anything other than surface measures to minimize material damage from longwall mining where conventional underground measures may not be practicable. The final rule requires that a permittee using longwall mining technology take necessary measures consistent with the mining method to minimize material damage to surface lands, structures, or facilities, with certain limitations. However, OSM recognizes that underground measures are not normally associated with longwall mining, because they are not normally consistent with longwall technology. For example, changes in the design of an ongoing mining operation would not be required, because OSM has concluded, after considering all comments and available literature, that the expense of such underground measures to minimize material damage from longwall mining would be prohibitive, and therefore inconsistent with congressional intent.

In responding to the proposal to require longwall permittees to use surface measures to minimize material damage, commenters allege that surface measures to minimize damage are neither technically nor economically practicable. These commenters allege that in some cases use of such measures has not prevented damage; that surface measures are not always appropriate; that many such measures remain experimental, unproven in effectiveness, and uncertain as to structural response; and that they are economically impractical. OSM finds these arguments unavailing, because they are all countered by the terms of paragraph 817.121(a)(2). That provision requires "necessary and prudent" measures, "consistent with the mining method employed," "to the extent technologically and economically feasible." Thus, if a measure is unnecessary or imprudent, inconsistent with longwall mining, or not technologically or economically feasible (or if it will not minimize material damage to protected features), it will not be required.

One commenter alleged that the term "subsidence control" does not include measures taken on the surface as suggested in the proposed rule to protect surface features from damage. The commenter noted that the use of the term subsidence control in SMCRA and the mining industry refers to the mine design including the sizing of openings and pillars which affect ground pressures within the underground mining environment; and in connection with other factors, affect the amount and type of ground movement that could result in surface deformation. To the extent this may have been true in the past, OSM regards this as irrelevant to the merits of this rulemaking, which establishes separate subsidence control requirements for those operations using planned subsidence and for those using conventional mining operations.

OSM is revising paragraph 784.20(b)(5) as an adjunct to the revisions to paragraph 817.121(a). The substance of these revisions is discussed infra under the heading for section 817.121(a).

OSM is also revising section 784.20(b)(8) as an adjunct to the revisions to section 784.20(a) and to reflect the requirements of section 817.41(j).

Section 817.10—Information Collection

OSM is revising Section 817.10 which contains the information collection requirements for Part 817 and the OMB clearance number.

One commenter stated that the burden required to establish a monitoring program under new paragraph 817.121(c)(4) to determine surface damage based on a specified angle of draw could require 1,000 hours to perform. Consultations were held with OSM mine engineers who estimated the burden at approximately 250 hours. Therefore, OSM estimates the public reporting burden for the new information collection requirements for §817.121(c)(4) to vary from 250 to 1,000 hours per response.

The collections of information contained in Part 817 have been approved by Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0048. The information will be used to meet the requirements of 30 U.S.C. 1211, 1251, 1266, and 1309(a) which provide, among other things, that permittees conducting underground coal mining operations shall meet the applicable performance standards of the Act. This information will be used by the regulatory authority in monitoring and inspecting underground mining activities. The obligation to respond is required to obtain a benefit.

Section 817.41(j)—Hydrologic Balance Protection

The proposed rule included two provisions concerning performance standards for underground mining activities, for water supply replacement: paragraphs 817.41(j), concerning replacement of water supply used for agricultural, industrial, or other legitimate use; and 817.41(k), concerning replacement of water supplies used for drinking, domestic, or residential use.

Proposed paragraph 817.41(j) provided that a person who conducts underground mining activities shall replace the water supply of an owner of an interest in real property who obtains water for agricultural, industrial, or other legitimate use from an underground or surface source, where the water supply has been adversely impacted by contamination, diminution, or interruption proximately resulting from the underground mining activities. Several commenters objected to this requirement.

Commenters claim that OSM provides no justification for changing its longstanding policy of not requiring water replacement for such users. The commenters maintain that the change in policy would contradict section 717(a) of SMCRA, which requires OSM to respect state water and property rights law. The commenters went on to state that this provision of the proposed rule

went beyond the requirements of the Energy Policy Act and preempts state water law, thus removing the protections that SMCRA affords to state water laws. The commenters also pointed to the unique physical characteristics of western states that necessitate respect for the individual state water laws. After consideration of all comments on this issue, and after review of all available documentation of the need for the performance standards set out in proposed paragraph 817.41(j), OSM has concluded that the existing record does not clearly support the need for this provision. Therefore, OSM has decided not to exercise its discretionary authority under SMCRA, to require such protection. OSM will not require replacement of water supplies not mandated by the Energy Policy Act. Therefore, OSM is not adopting proposed 817.41(j) that would have required replacement of water supplies used for agricultural and industrial uses.

In proposed 817.41(k), OSM proposed to require a permittee to promptly replace a drinking, domestic or residential water supply that is contaminated, diminished or interrupted by underground mining activities conducted after October 24, 1992, if the affected well or spring was in existence prior to the date the regulatory authority received the permit application for the underground mining activities. Baseline hydrologic information required in sections 784.14 and 784.22 would be used to determine the impact of underground mining activities on the well or spring.

The final rule provision concerning replacement of drinking, domestic or residential water supply is renumbered and appears at paragraph 817.41(j). Under the final rule, the permittee is required to promptly replace any drinking, domestic or residential water supply that is contaminated, diminished or interrupted by underground mining activities conducted after October 24, 1992, if the affected well or spring was in existence prior to the date the regulatory authority received the permit application for the activities causing the loss, contamination or interruption. The baseline hydrologic information required in §784.14 of this chapter and the geologic information concerning baseline hydrologic conditions required in §784.22 of this chapter shall be used to determine the impact of underground mining activities upon the well or spring. This information is not intended to be the exclusive basis for determining such impacts, and other relevant information could also be considered. Permittees both in primacy States and in Federal program States, as well as on

Indian lands, are required to comply with these provisions for operations conducted after October 24, 1992.

The majority of commenters agreed that the provision to require the permittee to promptly replace any drinking, domestic, or residential water supplies that have been adversely affected by underground activities is necessary to implement the provision of new SMCRA section 720(a)(2).

While commenters support the adoption of the proposed rule, they maintain that it is not necessary to monitor each water well in order to establish that subsidence has impacted a water supply well. OSM agrees that in many instances it may not be necessary to monitor each well. The location and frequency of well monitoring will be addressed on a case-by-case basis pursuant to existing paragraphs 784.14(h)(1) and 817.41(c).

A commenter asked for clarification that this provision would not in any way affect property rights under existing state water laws consistent with paragraph 717(a). Another commenter further recommended that OSM amend the provision to require that water rights regarding the affected well or spring be approved by the State Engineer or otherwise be recognized under State law. OSM points out that nothing in this requirement is intended to create an exception to section 717(a) of SMCRA. Section 717(a) requires deference to State water law on questions of water allocation and use. OSM interprets section 720 and the implementing rules as not requiring the replacement of water supplies to the extent underground mining activities consume or legitimately use the water supply under a senior water right determined under applicable State law. *See In re Permanent Surface Mining Regulation Litigation II*, Round III, 620 F. Supp. 1519, 1525 (D.C.D.C. 1985). However, OSM believes that section 717(a) concerns rights under State water law to consumption or use of water, and was not intended to address destruction or damage of the source of water, or contamination of the water supply. Thus, OSM anticipates that underground mining activities which cause destruction or damage of a water supply source, or contamination of a water supply, would be subject to the replacement requirements of section 720 even if the permittee possessed senior water rights.

A commenter recommended that compensation be available as an option for those limited circumstances where an impacted supply can't be restored. The commenter went on to note that Congress, in enacting the Energy Policy

Act, clearly noted that these provisions were not to "prohibit, or interrupt underground coal mining operations." Without the compensation option, the commenter asserted that operations would be forced to cease operating if they couldn't replace the water supplies. OSM does not agree. The terms of the Energy Policy Act unequivocally require replacement. Further, OSM does not anticipate that underground mining operations will be unable to comply with this statutory mandate. For example, if the permittee is unable to restore a spring or aquifer, the permittee should still be able to provide water from an alternative source, such as a public water supply, or by pipeline from another location.

Section 817.121(a)—Subsidence Control

OSM is adopting paragraph 817.121(a)(1) as proposed. The requirement provides that the permittee 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.

This language is not intended to be a change from the rules promulgated in 1983, (See 48 FR 24652, June 1, 1983), and relies on the basis and purpose stated in 1983. This rulemaking makes minor editing changes intended to more clearly reflect the meaning of the existing rule. Thus, under this provision, as an alternative to adopting measures consistent with known technology which prevents subsidence causing material damage to the extent technologically and economically feasible, an permittee may adopt mining technology which provides for planned subsidence in a predictable and controlled manner.

OSM is adopting paragraph 817.121(a)(2) with modification from the proposed rule. Under the proposed rule, if a permittee employed mining technology which provides for planned subsidence in a predictable and controlled manner, the permittee would have been required to take necessary and prudent measures, consistent with the mining method employed, to minimize material damage to surface lands, structures or facilities to the extent technologically and economically feasible. Under the final rule, the responsibility to minimize damage is limited to structures listed in the Energy Policy Act, namely noncommercial buildings and occupied residential

dwellings and related structures. However, unless the anticipated damage would constitute a threat to health or safety, the permittee would not have to take minimization measures if the permittee demonstrates that the cost of minimization would exceed the cost of repair, and would not constitute a threat to health and safety. The permittee is obliged to take minimization measures that are technologically and economically feasible. Upon written consent of the owners of such structures or facilities, no minimization measures would be required.

Section 2504(a)(2)(D) of the Energy Policy Act provides that any rulemaking regarding protection of natural gas or petroleum pipelines from subsidence damage is to be done after the study which OSM is mandated to perform pursuant to paragraph 2504(a)(2)(A) of the Energy Policy Act. Some commenters express concern that proposed paragraph 817.121(a)(2) prejudged this issue, while others support the rule because they believe it does impose additional subsidence damage protection for pipelines. Since OSM has not yet completed the study mandated by the Energy Policy Act, OSM does not intend this rulemaking to affect, interpret, or clarify the status quo regarding subsidence control requirements for natural gas or petroleum transmission pipelines, branch and gathering lines, or distribution mains. For these and other reasons discussed below, OSM has decided to limit 817.121(a)(2) to those structures protected under the Energy Policy Act, namely noncommercial buildings and occupied residential dwellings and related structures.

Commenters claim that the proposed provision that required permittees to minimize damage from planned subsidence operations was vague and unworkable since little guidance was provided as to what minimizing damage would entail. Commenters argue that OSM's contention that the new rule would clarify an unresolved issue over the meaning of paragraph 817.121(a) was misguided, since the proposed rule did little to clarify the issue and would likely result in even more litigation. Commenters also allege that, rather than clarify the obligation of planned subsidence operations concerning subsidence damage, the proposed rule would effectively remove the exception granted in SMCRA for planned subsidence. These commenters questioned the effect of OSM's proposed provision on the planned subsidence exception at section 516(b)(1) of SMCRA if an operator using planned subsidence must adopt and deploy the same

subsidence control measures as an operation not using planned subsidence.

OSM has considered these comments as well as the existing regulatory scheme of SMCRA and has concluded that, given the lack of clarity of section 516 on this issue, the most reasonable regulatory scheme and the regulatory scheme most consistent with SMCRA as amended by the Energy Policy Act, is to provide longwall subsidence damage minimization requirements that track the protections offered by the Energy Policy Act concerning subsidence from other forms of underground mining. Although the Energy Policy Act does not specifically address a minimization standard for longwall mining, it demonstrates Congress' intent to specifically require subsidence damage repair or compensation only for the structures listed in section 720. Therefore, the final rule limits the requirement to take measures to minimize material damage resulting from longwall subsidence to those structures protected in the Energy Policy Act. This is not a *prevention* standard, so a planned subsidence operation will not be required to meet the same subsidence control standard that applies to an operation not using planned subsidence. The addition of a limited requirement that longwall mine operators "minimize" damage in certain circumstances is not inconsistent with the SMCRA provision at section 516(b)(1) which exempts longwall mining from the requirement to *prevent* material damage. Authority for the minimization standard derives from both section 516(b)(1) and section 720 of SMCRA. OSM recognizes that Congress expressly stated in the Energy Policy Act that nothing in the statute regarding surface owner protections shall be construed to prohibit or interrupt underground coal mining operations. OSM believes that the final rule which contains a limited requirement for longwall operations to minimize subsidence damage in certain circumstances is consistent with Congress' guidance contained in the Energy Policy Act.

OSM believes that, by requiring only surface measures to minimize subsidence damage to non-commercial buildings and occupied residential dwellings and related structures, and only when it is technologically and economically feasible, the final rule establishes reasonable subsidence control measures that are also consistent with Congress' intent to support and encourage the use of planned and controlled subsidence. Further, by also providing that the requirement does not apply if the permittee demonstrates that

minimization would cost more than repair, OSM believes it has mitigated any potential for unreasonably expensive minimization measures. OSM recognizes that some material damage to protected structures from planned subsidence is possible and in some cases will not be prevented under this rule. However, under paragraph 817.121(c), such damage has to be repaired. The requirement is not intended to discourage the use of planned and controlled subsidence or to require underground activities not normally associated with such operations. OSM does intend, however, that this rule will require reasonable measures to be taken on the surface to protect occupied residential dwellings and related structures and non-commercial buildings from material damage. OSM believes that the subsidence control policy outlined in the Consolidation Coal Company video, presented to OSM during an on-site tour of coal fields, and available in the administrative record for this rulemaking, illustrates the kinds of measures that would adequately meet the needs of the homeowner and the permittee in deciding when and what types of measures should be taken on the surface to minimize damage. Further, this videotape demonstrates the reasonableness of using such minimization techniques.

The commenters also question the provision that the proposed performance standards are mandatory unless the landowner consents. Commenters state that requiring measures to be taken to protect structures and facilities unless the owner consents, raises a number of issues with regard to exactly when and for what purposes a permittee is required to obtain the owner's consent. For example, if the permittee finds that certain measures are not prudent or economically or technologically feasible, must the permittee still obtain the owner's written consent? Also, if an owner were to steadfastly refuse to consent to an otherwise flawless planned subsidence operation, commenters opined that the requirement to obtain the owner's consent could be considered an uncompensated taking of the permittee's property right.

The obligation to take necessary and prudent measures on the surface consistent with the mining method employed, to minimize material damage to occupied residential dwellings and related structures and non-commercial buildings to the extent technologically and economically feasible, except when minimization costs would exceed repair

costs, is mandatory. However, neither the regulatory authority nor the permittee is required to obtain the landowner's concurrence in order to satisfy that test. Instead, the minimization measures would be explained in the subsidence control plan, which the landowner has a right to review and object to, and which requires the approval of the regulatory authority. The consent provision allows the permittee to negotiate an arrangement with an owner of a structure or facility to waive the protection otherwise afforded by paragraph 817.121(a)(2). Such a written waiver would have to waive expressly the regulatory protection provided by the proposed rule and therefore could not be a document which predates adoption of the final rule. OSM notes that such a waiver would not be effective to waive any requirement pursuant to paragraph 817.121(c) to repair damage from subsidence. In addition to the waiver provision, the final rule includes a provision that a permittee will not be required to take measures to minimize subsidence damage upon a demonstration that the costs of such measures would exceed the repair costs for the damage. In both cases, the permittee could allow the damage to occur, and repair it pursuant to paragraph 817.121(c).

One commenter alleges that damage minimization measures for longwall mining cannot be limited to surface measures, because the SMCRA legislative history indicates that Congress contemplated underground preventive measures such as backstowing, provided such measures are technologically and economically feasible. The commenter cites H.R. Rep. No. 218, 95th Congress, First Session (1977) at 125-126. OSM does not agree with this characterization of the cited House Report. OSM believes the cited House Report materials discuss damage prevention and minimization measures appropriate for conventional room-and-pillar mining; there is no specific reference to longwall mining. For example, the referenced portion of the report states that:

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.

H. Rep. No. 218, 95th Cong., 1st Sess. 126 (1977). Such problems are not characteristic of longwall mining. Therefore, it is unlikely Congress had longwall mining in mind when it discussed appropriate prevention

measures in this passage. OSM concludes the report does not show congressional intent to require use in longwall mining of the measures discussed in this passage.

Section 817.121(c)—Subsidence Control
817.121(c)(1)

In the proposed rule, paragraph 817.121(c)(1) would be modified to substitute "subsidence related material damage" for "any material damage resulting from subsidence;" "permittee" for "operator;" and "its pre-subsidence value and supporting reasonably foreseeable uses it was capable of supporting * * *" for "the value and reasonably foreseeable uses which it was capable of supporting * * *." The changes were editing changes not intended to have a substantive effect on the rule. However, commenters express concern over the changes in the language of paragraph (c)(1) because the preamble did not contain an explanation for the proposed changes. In the final rule, OSM is not amending the text of this provision but is adding a heading for the paragraph to assist in reading and application of the provision.

817.121(c)(2)

Paragraph 817.121(c)(2) is being adopted as proposed. The final rule requires that a permittee either promptly repair material damage caused by subsidence to any non-commercial building or occupied residential dwelling or related structure, or compensate for material damage caused by subsidence to those structures. If the repair option is selected, the permittee must fully rehabilitate, restore or replace the damaged structure. If the compensation option is selected, the permittee must compensate the owner of the damaged structure in the full amount of the diminution of value resulting from the subsidence-related damage. Compensation may be accomplished by the purchase, prior to mining, of a non-cancelable premium-prepaid insurance policy. The requirements of this paragraph apply to all subsidence-related damage caused by underground mining activities conducted after October 24, 1992.

Paragraph 817.121(c)(2) implements new SMCRA section 720 (a)(1), which requires that all underground coal mining operations promptly repair or compensate for material damage to non-commercial buildings and occupied residential dwellings or related structures as a result of subsidence due to underground coal mining operations. Permittees in both primacy States and

Federal program States, as well as on Indian lands, are required to comply with this provision for operations conducted after October 24, 1992. Possible interim direct enforcement of this provision by OSM in some primacy States prior to amendment of State programs is addressed below in revisions to Part 843.

A group of commenters recommended that the rule recognize that pre-subsidence agreements and post-subsidence agreements between the property owner and the permittee would satisfy the requirements under paragraph 817.121(c)(2), and that nothing in this paragraph should be construed to prohibit or interrupt underground coal mining operations.

The use of pre- and post-subsidence agreements would be an acceptable means of fulfilling the requirement so long as the terms met the requirement under paragraph 817.121(c)(2) that the permittee repair or compensate any subsidence-related material damage to any non-commercial building or occupied residential dwelling or related structure. Any permittee/owner agreements cannot negate the requirement of the Energy Policy Act to repair or compensate for subsidence-related material damage to occupied residential dwellings and related structures as well as non-commercial buildings. OSM anticipates that repair pursuant to paragraph 817.121(c)(2) will restore the protected structure or facility to its premining capacity, features, value, and utility. OSM reiterates that the requirements in this paragraph are not intended to prohibit or interrupt underground coal mining operations.

Commenters allege that the permittee is not under obligation to repair subsidence-related damage to any building constructed after mining has occurred. OSM agrees with this comment. If the protected structure was damaged from subsidence from underground mining, and that mining occurred after the date set forth in the Energy Policy Act, then the Energy Policy Act requires that the permittee repair or compensate for the material damage. However, Congress does not discuss whether there should be any different treatment for structures that did not exist when the mining took place. For such structures, there would be no opportunity for the permittee to mitigate or prevent subsidence damage, and thus avoid the requirement to repair or compensate. Nor would it be possible for a permittee to anticipate what structures might be built above the mine after mining occurs and thus plan for anticipated costs to determine if mining would be economically feasible. On the

other hand, surface owners can know the extent to which land they plan to build on has been undermined by previous mining operations. Therefore, OSM believes that it is reasonable to conclude that the requirement should not apply to structures which did not exist at the time of mining. OSM is adopting this interpretation in the final rule, and has revised paragraph 817.121(c)(2) accordingly.

Commenters also allege that the obligation to repair subsidence-related damage does not apply to buildings acquired after the mining occurred. OSM does not agree. SMCRA section 720 provides that underground coal mining operations conducted after the date of enactment of the Energy Policy Act shall promptly repair or compensate for material damage resulting from subsidence caused to *any* occupied residential dwelling and structures related thereto, or non-commercial building. Section 720 does not distinguish among such structures based on whether they were acquired before or after the date of mining. Rather, all such structures are subject to the requirement to promptly repair or compensate. OSM believes the language of the statute is clear, and the interpretation urged by commenters is inconsistent with the terms of the statute.

A commenter notes that the proposed rules lack provisions establishing requirements for notification of the permittee or regulatory authority, or for estimate, repair, replacement, or compensation time frames. OSM believes that existing citizen complaint procedures are adequate and appropriate to address surface owner complaints of subsidence damage under these rules.

OSM believes preparation or approval of estimates is properly addressed under existing procedures, by case-by-case negotiations with the surface owner, and regulatory authority review of reclamation measures. Similarly, OSM believes timely repair or compensation of protected structures is adequately addressed by the use of the statutory term "prompt," which is commonly understood to mean "expeditious" or "immediate." OSM notes that several commenters give examples of situations which may involve substantial variation in the time required before the full extent of subsidence damage can be confirmed, or before repairs properly may be commenced. OSM concludes that what is reasonably prompt for repair or compensation is properly determined on a case-by-case basis.

Commenters request changes in the existing rules providing for notice to property owners in advance of

underground mining, because the rules require notice at least six months before mining, and this does not allow the surface owner to determine when mining actually takes place under his property. OSM did not propose to amend existing rules concerning advance notice of underground mining to surface owners, and the record does not justify a new rulemaking on this issue at this time.

A commenter requests that OSM clarify that the permittee is not required to restore or compensate for deterioration to a structure beyond what was caused by subsidence from underground mining. OSM believes the language of proposed paragraph 817.121(c)(2) is clear to this effect and that no rule changes are required to achieve this result.

One commenter asked that OSM make clear that any and all subsidence damage is subject to the requirement to repair and compensate indefinitely into the future, even if the permittee has previously repaired or settled with the affected property owner or pipeline operator; and that OSM clarify that the obligation to repair is not dependent on active mining or an active permit or upon termination of jurisdiction by OSM. OSM agrees that once damage occurs, an underground mining operation has a statutory obligation to repair, which may not be negated by a prior agreement.

817.121(c)(3)

The purpose of proposed paragraph 817.121(c)(3) was to ensure repair or correction of material damage caused by subsidence to those structures and facilities not covered by new SMCRA section 720 (a)(1) and paragraph (c)(2) of proposed section 817.121. The proposed amendments to paragraph (c)(3) would have required repair or correction irrespective of limitations otherwise applicable under State law. The proposed rule would have required a permittee to either correct subsidence-related material damage to any structures or facilities not protected by paragraph (c)(2) by repairing the damage, or compensate the owner of such structures or facilities in the full amount of the diminution in value resulting from the subsidence. Repair of damage would have included rehabilitation, restoration or replacement of damaged structures or facilities. Compensation by the permittee could have been accomplished by the purchase, prior to mining, of a non-cancelable premium-prepaid insurance policy.

A number of commenters support the proposed rule and the need for the

proposed rule, and discuss various respects in which the existing rule and state laws fail to adequately protect structures and facilities from subsidence damage. One commenter recommended that OSM draft a regulation stipulating that any and all subsidence damage is subject to the regulations to repair and compensate even if the permittee has previously repaired or settled with the affected property owner.

The majority of commenters noted that in the Energy Policy Act Congress expressly limited relief for damage arising from subsidence to "occupied residential dwellings and structures related thereto, or non-commercial buildings" and water supplies. The commenters argued that for more than a decade OSM has required permittees to correct material damage "to the extent required by state law" and they state that no compelling need has been demonstrated that would require OSM to change its policy and preempt state law and property rights. Therefore, commenters claim that the proposed rule has no basis under the Energy Policy Act and that OSM's cursory explanation of the reasons behind the new rule demands that the proposed rule not be adopted.

Commenters also claim that the existing state law remedies are adequate and that court decisions support their proposition that SMCRA does not specifically "require the Secretary to impose a duty to restore structures damaged by subsidence." *National Wildlife Fed'n v. Lujan*, 928 F.2d 453, 458 (D.C. Cir. 1991). These commenters argue that, without ample evidence that state law remedies for such damage are inadequate, there is no compelling reason for OSM to disregard the clear congressional intent behind SMCRA that "state laws govern the resolution of any disputes about property right which might arise from such separations, and this Act does not attempt to tamper with such state laws." S. Rep. No. 95, 95th Cong. 1st Sess. at 56 (1977).

Commenters also point out that currently the states conducting 99 percent of the nation's coal mining provide statutory regulatory relief for damage caused by subsidence. Some commenters allege that the proposed rule would significantly affect private property rights and raise numerous issues regarding the Fifth Amendment's takings clause. Those commenters state that there is simply no compelling evidence for OSM to preempt state property law and that the proposed rule violates the express terms of the Energy Policy Act.

Numerous commenters interpret this provision as providing for subsidence

protection of natural gas and petroleum pipelines. Some commenters assert that the proposed rule directly contradicts the congressional requirement that the Secretary complete a study on the pipeline issue before any rules on the issue are promulgated. Commenters also comment extensively on the impact the rule would have on the property rights of both coal and pipeline companies. Some commenters argued that even more extensive protection of pipelines is appropriate or necessary. OSM has reviewed these comments, but reiterates that, with the very limited exception noted above for connector lines attached to specific occupied residential dwellings or non-commercial buildings, Congress intended no change in the subsidence control regulations regarding natural gas and petroleum pipelines, and that no rulemaking on this issue is contemplated pending completion of the study on this subject pursuant to section 2504 of the Energy Policy Act. OSM is not addressing this issue in this rulemaking. If, after completion of the subsidence pipeline study, OSM determines that further rulemaking may be appropriate on this subject, OSM will invite interested persons to review and comment on any further rulemaking.

OSM has considered all comments and has decided not to adopt the proposed changes to paragraph 817.121(c)(3). Instead OSM will retain the State law limitation set out in the existing regulations. The basis and purpose for the State law limitation was upheld by the D. C. Circuit Court of Appeals. *National Wildlife Fed'n v. Lujan*, 928 F.2d 453, 458 (D.C. Cir. 1991). OSM believes that circumstances have not changed significantly since OSM's adoption of the State law limitation; and OSM concludes that the record developed in this rulemaking is insufficient to justify eliminating the State law limitation except as provided in the Energy Policy Act. Under the final rule, the permittee is required, to the extent required under applicable provisions of State law, to either correct material damage resulting from subsidence caused to any structures or facilities not protected by paragraph (c)(2) of this paragraph by repairing the damage, or compensate the owner of such structures or facilities in the full amount of the diminution in value resulting from the subsidence. Repair of damage shall include rehabilitation, restoration or replacement of damaged structures or facilities. Compensation may be accomplished by the purchase, prior to mining, of a non-cancelable premium-prepaid insurance policy.

817.121(c)(4)

OSM proposed paragraph 817.121(c)(4), which would have established a rebuttable presumption of a causal link between the operation of an underground mine and subsidence damage occurring within a specified zone over the area of coal extraction. Specifically, the proposed rule provided that, if damage to lands, structures or facilities occurs as a result of earth movement within an area determined by projecting a 35 degree angle of draw from the outermost boundary of any underground mine workings to the surface of the land, a rebuttable presumption would exist that the permittee caused the damage. The regulatory authority could also have approved a different angle of draw on a case-by-case basis if the permittee demonstrated that the proposed angle of draw is based on a site-specific geotechnical analysis of the potential surface impacts of the mining operation. If the permittee was denied access to the land or property for the purpose of conducting the pre-subsidence survey in accordance with § 784.20(a) of this chapter, no rebuttable presumption would have existed. These requirements would have applied only to subsidence-related damage caused by underground mining activities conducted after October 24, 1992.

After reviewing the comments and based on OSM technical analysis, OSM has modified the final rule from that which was proposed. In the final rule, paragraph 817.121(c)(4) has been divided into five subparagraphs for clarification and readability. Final paragraph 817.121(c)(4)(i), provides 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 the permittee caused the damage. Thus, the final rule is limited to structures protected under section 720(a) of SMCRA. Also, instead of 35 degrees, as proposed, the final rule provides that the presumption applies to a 30 degree angle of draw. However, a State regulatory authority may amend its regulatory program to apply the presumption to a different angle of draw upon demonstrating in writing that the angle is more reasonable than the 30 degree angle of draw, based on geotechnical analysis of the factors affecting potential surface impacts of underground coal mining operations in the State. OSM recognizes that the "more reasonable" standard is a

different standard than would otherwise apply under SMCRA section 503(a) and 30 C.F.R. section 732.15(a) to OSM review of a State regulatory program amendment. However, OSM believes that this is the appropriate standard to apply to approval of a different State-wide angle of draw, because it will allow a State to adopt either a greater or lesser angle of draw, so long as the State angle of draw is better supported by geotechnical analysis than is the 30 degree angle of draw. OSM believes this standard for review will best assure that the area within which the presumption will apply can reasonably be expected to include almost all damage caused by subsidence, without unreasonably expanding the permit applicant's burden of surveying to areas where damage would likely not be attributable to subsidence.

Under final paragraph 817.121(c)(4)(ii), a person may request and the regulatory authority may approve application of the presumption to a different site-specific angle of draw based on a site-specific analysis submitted by the permit applicant. To establish a site-specific angle of draw, a permit applicant must demonstrate and the regulatory authority must determine in writing that the proposed angle of draw has a more reasonable basis than the applicable standard, based on a site-specific geotechnical analysis of the potential surface impacts of the mining operation. Like the standard for approval of a different State-wide angle of draw, this standard for approval of a site-specific angle of draw is intended to assure that the area within which the presumption will apply can reasonably be expected to include almost all damage caused by subsidence, without unreasonably requiring the permit applicant to survey the area where damage would likely not be attributable to subsidence.

Under final paragraph 817.121(c)(4)(iii), if the permittee was denied access to the property to conduct the presubsidence survey in accordance with § 784.20(a), no rebuttable presumption exists.

Final paragraph 817.121(c)(4)(iv) sets forth examples of evidence which would rebut the presumption, including evidence that establishes that the damage predated the mining; that the damage was proximately caused by some other factor and not by subsidence; and that the damage occurred outside the surface area where subsidence was caused by the underground mining.

Paragraph 817.121(c)(4)(v) requires that all relevant and reasonably available information must be

considered in any determination as to whether subsidence damage to protected structures subject to paragraph 817.121(c)(2) was caused by subsidence from underground mining.

The purpose of paragraph 817.121(c)(4) is to set out a procedure under which a specified area would be subject to a rebuttable presumption that subsidence from underground mining caused surface damage to non-commercial buildings or occupied residential dwellings and related structures. This evidentiary standard would simplify establishing causation of subsidence damage in many cases, by relieving the regulatory authority of the initial burden of providing evidence that damage was caused by the mine operation. The presumption would be established only after it is determined that damage caused by earth movement did in fact occur within the specified angle of draw. The burden of rebutting the presumption will be appropriately on the mine operator, who will have the best information as to the nature, timing, and sequence of mining activities, geological conditions, etc.; i.e., the types of facts directly related to causation of the damage. Permittees may provide information to rebut the presumption either before an enforcement action is taken, when the regulatory authority or OSM is determining whether a violation exists because of a failure to repair or compensate for damage; or after enforcement action occurs.

OSM believes that the establishment of a specific angle for the presumption is important and has a number of effects or ramifications. In any enforcement proceedings concerning allegations of subsidence damage to protected structures, it will affect the initial burdens of going forward with the evidence for both the regulatory authority and the permittee. It will also affect operator permitting costs to some extent, because under the amendments to paragraph 784.20(a)(3) in this rulemaking, once the angle for the presumption is established, permit applicants will be required to comply with all presubsidence survey requirements covering at least the area within the angle to which the presumption applies. OSM has concluded that application of the presumption to the area within a specified angle provides needed protection of surface interests, while providing a clear limitation on the permit expenses that could be incurred in the absence of defined limits to a presumption. As a result, OSM believes applying the presumption to a specified angle will balance the various purposes

of SMCRA, including both environmental protection and the SMCRA section 102(k) purpose of encouraging the full utilization of coal resources through the application of underground extraction technologies.

Since a presumption is important in all cases, OSM has decided to adopt a nationwide angle of draw for that presumption. Among issues noted by various commenters was concern over using the "angle of draw" and the appropriateness of the angle proposed. Depending on factors such as the location and size of the mine, the percent of extraction, and the local geology, the angle of draw or the area where damage may occur can vary considerably both regionally and locally. Yet, there is a need for a nationwide presumption standard so long as it can be modified on a state-wide or site-specific basis.

Many studies have been conducted to measure the extent of surface displacement and damage resulting from subsidence. OSM has considered such studies including:

- Montz, H.W., and Norris, R.U., 1930, "Subsidence from Anthracite Mining, with an Introduction on Surface Report," Transactions AIME, Vol. 88, pp. 98-134.
- Newhall, F.N., and Plein, L.N., 1936, "Subsidence at the Merrittstown Air Shaft Near Brownsville, Pennsylvania," Transactions AIME, Vol. 119, pp. 58-94.
- Cortis, S.E., 1969, "Coal Mining and Protection of Surface Structures are Compatible," Mining Congress Journal, Vol. 55, No. 6, Jun., pp. 84-88.
- Bauer, R.A., and Hunt, S.R., 1981, "Profile, Strain, and Time Characteristics of Subsidence from Coal Mining in Illinois," Proceedings 1st Workshop on Surface Subsidence Due to Underground Mining, S.S.Peng, ed., West Virginia University, Morgantown, WV, pp. 207-219.
- Conroy, P.J., 1979, "Rock Mechanic Studies, Longwall Demonstration at Old Ben # 24, Benton, Ill.," Phase I and II Reports submitted to USBM, 57 pp.
- Peng, S.S., and Chayan, C.T., 1981, "Surface Subsidence, Surface Structural Damages and Subsidence Prediction Modelling in the Appalachian Coalfields," Proceedings Workshop on Surface Subsidence Due to Underground Mining, S.S.Peng, ed., West Virginia University, Morgantown, WV, pp. 73-87.
- Adamek, V., and Jeran, P.W., 1981, "Evaluation of Existing Predictive

Methods for Mine Subsidence in the US," Proceedings 1st Annual Conference on Ground Control in Longwall Mining and Mining Subsidence, SME-AIME, New York, pp. 183-187.

- Wade, L.V., and Conroy, P.J., 1977, "Rock Mechanic Study of a Longwall Panel," Preprint No. 77-1-391, SME Fall Meeting, St. Louis, MO.
- Conroy, P.J., 1979, Rock Mechanics Studies, Longwall Demonstration at Old Ben #24, Benton, IL, Phase I and II Report, Submitted to US Bureau of Mines, 57 pp.
- Bauer, R.A., and Hunt, S.R., 1981, "Profile, Strain, and Time Characteristics of Subsidence from Coalmining in Illinois," Proceedings, Workshop on Surface Subsidence Due to Underground Mining, S.S.Peng and M.Harthill, eds., West Virginia University, Morgantown, WV, pp. 207-217.
- Hood, M., Ewy, R.T., and Riddle, L.R., 1981, "Empirical Methods of Subsidence Predicting—A Case Study," Proceedings Workshop on Surface Subsidence Due to Underground Mining, S.S.Peng, ed., West Virginia University, Morgantown, WV, pp. 100-123.
- Gentry, D.W., Able, J.F., 1978, "Rock Mass Response to Mining Longwall Panel 4N York Canyon Mine," Presentation at AIME Annual Meeting, Atlanta, GA, 33 pp.
- Allgaier, F.K., 1988, "Surface Subsidence over Longwall Panels in the Western US—Final Results at the Deer Creek Mine, Utah," Information Circular 9194, US Bureau of Mines, 17 pp.
- Durand, C.R., 1984, "Coal Mine Subsidence Western United States," Man-Induced Land Subsidence, Reviews in Engineering Geology, Vol. VI, T.L.Holzer, ed., pp. 151-194.
- Peng, S.S., and Chiang, H.S., 1984, Longwall Mining, Wiley, New York, 708 pp.
- Peng, S.S., 1986, Coal Mine Ground Control, 2nd ed., Wiley, New York, 491 pp.
- Hasenfus, G.J., 1984, "The Prediction of Surface Subsidence Due to Room and Pillar Mining in the Appalachian Coalfield," MS Thesis, VPI & SU, 326 pp.

For the following reasons, OSM has concluded that the angle of draw is a reasonable way of delineating the area within which it will be presumed that damage was caused by subsidence. The "angle of draw" is the angle of inclination between the vertical at the

edge of the underground mine workings and the point of zero vertical displacement at the edge of a subsidence trough. Thus, the angle of draw is one way to define the outer boundary of subsidence displacement that may occur at the surface. This angle encompasses the area within which both dynamic and static strains, as well as phenomena such as curvature and tilt, would occur from subsidence. As the subsidence trough is developing, soils and rocks within the trough undergo dynamic strains. Dynamic strains change as to intensity and location, as subsidence progresses. After subsidence is completed, the soils and rocks could be in a condition of static strain. Different types and degrees of static strains occur in different locations of the subsidence trough.

OSM has considered defining the area in which a presumption would apply using another type of angle, such as the "angle of critical deformation" (also known as the "angle of break" or "angle of fracture"). This term refers to the inclination from the vertical of the line connecting the edge of the mined area with the surface point exhibiting the *maximum* tensile strain (or stretching). The angle of critical deformation occurs in the area between the boundary of the subsidence trough and the projected vertical from the edge of underground workings. The angle of critical deformation is always smaller than the angle of draw.

However, OSM has concluded that, while the angle of critical deformation describes where the maximum tensile strains (stretching) will occur once subsidence has occurred, the angle is not useful in describing where subsidence damage to structures may occur for two reasons. First, as subsidence is occurring, dynamic strains, both stretching and compressing, vary in location and may occur in places other than where those strains will exist once subsidence is complete. Thus, because the angle of critical deformation does not necessarily reflect where dynamic strains would occur, it may not account for the area where damage may be caused while subsidence is still occurring. Second, because the sensitivity of structures to subsidence damage varies, structural damage may be caused by strains far less than the maximum tensile strain; thus damage may occur to structures that are not subject to maximum tensile strain and that are located outside the angle of critical deformation. Moreover, structures may be more sensitive to damage from other subsidence-related phenomena such as curvature, tilt, and compressive strains that may occur

within the angle of draw, but outside the angle of critical deformation.

While recognizing regional and site-specific variability in the angle of draw, OSM has decided to establish a national standard of 30 degrees. This is consistent with the outer limits determined for earth movement in most subsidence studies across the United States, particularly later studies addressing long wall mining. Also, the Subsidence Deformation Prediction Model developed for OSM by Virginia Polytechnical Institute, predicts an angle of draw ranging from 27 degrees to 31 degrees for 90 percent extraction where the percentage of hard rock in the overburden varies from 70 percent to 30 percent respectively. OSM has placed the results of this computer-based analysis in the administrative record for this rulemaking. This nationwide standard is conservative and offers reasonable protection to surface owners under anticipated subsidence scenarios. However States, coal companies, and/or citizens have a mechanism to adopt state or site-specific values based on regional or site-specific data. These variations could be incorporated into State programs or calculated on a permit-specific basis. Thus, the nationwide angle of draw can be replaced by the State, either by a State-wide standard, or on a site-specific basis, to the extent that a different angle of draw is demonstrated to be more reasonable.

Although the final rule provides that the presumption shall apply to a 30-degree angle of draw, it allows the States to establish a different angle of draw, based on geotechnical analysis of the factors affecting potential surface impacts of underground operations. This angle of draw should be the angle within which vertical displacement of the surface is reasonably expected. Further, as discussed above, the rule ensures that the regulatory authority also has the flexibility to establish a different angle of draw on a site-specific basis, where such variation is justified by appropriate geotechnical analysis. OSM anticipates that implementation of this rule will be facilitated through the use of computer-aided-design technology for subsidence prediction. Computer program packages for predicting surface movement and deformation caused by underground coal extraction should be very helpful to States and permittees in this regard. OSM has designed a national computer system, the Technical Information Processing System (TIPS), in close cooperation with the States, which includes the subsidence prediction model previously mentioned (which is

also commercially available), for site-specific application. Thus the rule properly provides a national standard, but also provides for variations based on state-of-the-art technology where appropriate because of differences among States or within States.

If Federal enforcement of paragraph 817.121(c)(2) occurs under 30 CFR 843.25 described *infra*, with respect to subsidence-related damage to protected structures caused by underground operations conducted after October 24, 1992, the presumption of causation will attach to the 30-degree angle of draw for all existing permitted operations whether or not a presubsidence survey has been conducted pursuant to the new survey requirements of this rule. The presumption will apply in the period before a State's amended permitting regulations are effective, because the new requirements to survey the condition of surface features will not apply, so there will also be no provision for surface owner denial of permission—and therefore that ground for negating the presumption will not apply. However, during that time, if a permittee elects to conduct a survey of the presubsidence condition of protected structures and access is denied, the decisionmaker may consider those circumstances in deciding whether the presumption has been established. Immediately after the State amends its program, permittees could proceed to request designation of a different angle of draw or utilize the one contained in the state program if different than 30 degrees.

A number of commenters support the proposed provision that would have established a presumption that subsidence caused damage to lands, structures or features within a specified angle of draw of the mining. One commenter further notes that section 784.20 of the proposed rules requires the applicant to show and to survey all structures and facilities which may be materially damaged by mine subsidence, and states that if the identified structures are in fact damaged, then it is logical to assert that the mine caused the damage to those structures and a rebuttable presumption process is reasonable.

Some commenters suggest that the area in which the presumption would apply should be broadened to a 45-degree angle of draw. The commenters allege that this greater area of presumption is supported by the fact that subsidence impacts vary in both scope and range depending on many different factors including the area's geography and the type of mining being conducted. These same commenters add

that because of this uncertainty the angle of draw must be large enough to include the wide variety of subsidence impacts.

Other commenters assert that the proposed rule references no sound technical or scientific basis to support the presumption, and that OSM does not have the authority to promulgate the rule. These commenters claim that it is well documented that damage caused by subsidence depends on many different factors which vary throughout the United States; and that a presumption that mining caused the damage within a pre-set nationwide angle of draw fails to take any of the important regional factors into account. Also, commenters argue that the appropriate angle of draw depends on the geology of the region and type of underground mining that is being conducted. It is argued that these regional differences in the effects of underground mining are the very reason that Congress intended for the States to be the primary enforcers of SMCRA. The commenters also claim that the "Hasenfus" thesis cited by OSM in the preamble does not support the proposed rule's 35-degree angle of draw because the thesis is based on data collected from room and pillar mines that were mined before the implementation of SMCRA's subsidence control requirements.

The commenters also allege that the rule on presumption has no basis in SMCRA and that the rule violates the allocation of burdens and standards of proof set out in Section 7(c) of the APA, citing *Director, OWCP v. Greenwich Collieries*, 114 S. Ct. 2251 (1994) (hereafter, "*Collieries*"). Commenters argue that nothing in SMCRA provides authority for OSM to establish the standard or burden of proof in a civil action seeking to enforce the repair and compensation requirements of section 720 of SMCRA. Commenters also argue that the allocation of the burdens of production and proof must be determined by the applicable law in the forum where the cause is brought. In addition, commenters allege that the proposed rule violates section 7(c) of the APA. Section 7(c) of the APA states that, except as otherwise provided by statute, the proponent of a rule or order has the burden of proof. Thus, these commenters interpret the APA to not provide for an agency to relieve a party of its initial burden of production to make out a prima facie case. Under commenters' analysis, presumptions can only be created when a party has first introduced substantial evidence supporting the presumption. Further, the commenters speculate that relieving a party of their duty to establish a prima

facie case based on a preponderance of the evidence might not survive a challenge based on procedural due process grounds.

OSM recognizes the concerns expressed by the commenters concerning variations in subsidence angle of draw, and the angle wherein damage is expected. As discussed above, OSM has designed the rule to address the possible range of appropriate angles within which it would be reasonable to presume that damage is subsidence related. OSM does not agree with commenters' arguments concerning lack of authority under SMCRA or the APA. OSM believes the rule is fully authorized by, and appropriate for implementation of section 720(a) which requires prompt permittee repair or compensation for damage to protected structures; section 720(b), which requires the Secretary to adopt implementing rules; section 516, which authorizes the Secretary to "promulgate rules and regulations directed toward the surface effects of underground coal mining operations" and to consider the distinct difference between surface coal mining and underground coal mining; section 501(b), which requires the Secretary to adopt implementing procedures and requirements; and section 201(c), which requires the Secretary to "publish and promulgate such rules and regulations as may be necessary to carry out the purposes and provisions of this Act." The Secretary is using his rulemaking authority to adopt provisions reasonable and necessary to guide and facilitate implementation of these sections.

Further, commenters have mischaracterized the effect of the presumption established under this provision. The presumption does not change the ultimate burden of proof in a determination. The ultimate burden of persuasion still lies with the regulatory authority or OSM. OSM believes that inferences and presumptions are an essential aspect of the adversary process. A trier of fact must often determine the existence of an element of a violation from the existence of one or more evidentiary facts. From its experience in implementing SMCRA, OSM believes that there is sufficient nexus and probability of causation between the facts that are deemed to give rise to the rebuttable presumption under this paragraph, and the resulting presumption. As indicated above, OSM believes this presumption is particularly appropriate in light of the fact that the permittee will have the best access to the facts that will be key to any ultimate conclusions on the issue. Such a presumption is consistent with the

traditional approach that the burden of going forward with evidence normally falls on the party with knowledge of the facts involved. See, e.g., *EDF, Inc. v. EPA*, 548 F.2d 998 at 1004 (D.C. Cir. 1976) as modified and supplemental opinion on denial of rehearing.

In most cases, OSM does not expect section 7(c) of the APA to apply, as most enforcement cases are properly disposed of without the requirement for a formal hearing subject to such provisions of the APA. Rather, the presumption in this rule establishes a standard pursuant to which a regulatory authority shall evaluate permittee compliance with a SMCRA performance standard, for purposes of regulatory authority enforcement of SMCRA. Further, the presumption helps to ascertain the scope of the obligation to repair.

The presumption will not relieve any party of the initial burden of production, but rather defines what that burden will be, and when it may shift, in enforcement actions under this paragraph. That is, in enforcement actions by the State regulatory authority or OSM, if the evidence establishes that damage has occurred to protected structures as a result of earth movement within the applicable angle of draw, then this evidence satisfies the initial burden of production, and then gives rise to a rebuttable presumption of causation by subsidence. At that point the regulatory authority or OSM would have satisfied its obligation to make a prima facie case on the issue of causation. The permittee then has the burden of production to rebut the presumption or to negate other relevant evidence, by providing information that relates to the effect of the underground mining, such as information on the nature and timing of the underground mining operation, geological conditions in the area mined, and the premining condition of the surface feature. The presumption can be rebutted with technical support either prior to an enforcement action being taken by the regulatory authority, or in response to such an action during the review or appeal process. The proof needed to rebut the presumption will be determined on a case-by-case basis. Because the ultimate burden of persuasion still lies with the regulatory authority or OSM, in any cases in which a formal hearing is required to be held, the rebuttable presumption is fully consistent with section 7(c) of the APA, and with the holding in the *Collieries* case cited by commenters (114 S. Ct. 2251). That case interpreted the section 7(c) burden of proof provision, which provides that, "[e]xcept as otherwise provided by statute, the proponent of a

rule or order has the burden of proof." The court held that, under that APA provision, the proponent of an order has the burden of persuasion, not just the burden of production (or the burden of going forward with the evidence). (114 S. Ct. at 2251). In any case, a determination as to causation must be based on consideration of all relevant and reasonably available information.

OSM does not agree that it is precluded from establishing such a rebuttable presumption based on the commenters' assertion that allocation of burdens of production and proof must be determined by the applicable law of the forum. Underlying State law does not preclude OSM from adopting reasonable rules implementing SMCRA; rather, inconsistent State law must be changed to be consistent with SMCRA and implementing regulations. Therefore, OSM anticipates that an implementing revision to the State regulatory program will be appropriate in most States.

Contrary to commenters' expressed concern, OSM does not intend to require a court to apply the presumption to citizen suits seeking civil remedy under the performance standards of section 720 of SMCRA; OSM anticipates that the court in question will establish the standard or burden of proof to be applied in any civil action before it, consistent with SMCRA.

A commenter has indicated concerns that this presumption will be unfair to existing operations, because they will not have done a presubsidence survey and so will be unable to document premining conditions. OSM does not agree. Permittees have had notice of the amendment establishing the requirements for repair, replacement, and compensation since enactment of the Energy Policy Act in 1992. Therefore, permittees have had ample opportunity to conduct a premining survey to document premining conditions, if they wished to establish baseline information. Further, nothing in existing rules or in the rules being adopted by OSM precludes a permittee from updating information as to premining surface conditions during the course of the mining operation. Therefore, a permittee could reasonably provide a presubsidence survey and then provide an update of conditions a reasonable time before mining is to begin in a particular area. And since permittees are in the best position to establish both what changes have occurred and what actions and geological factors are associated with those changes, they are not disadvantaged by a presumption that recognizes their advantage in

documenting and evaluating the consequences of their mining. Also, OSM assumes that if a permittee of an existing operation has made reasonable efforts to conduct a presubsidence survey which documents the presubsidence condition of protected structures, and permission has been refused by a property owner, then in any enforcement proceeding OSM or the regulatory authority may take these circumstances into account in determining what weight, if any, to give to the rebuttable presumption of causation.

OSM believes that commenters' concerns about fairness and about due process with regard to the presumption, are also misplaced. Due process concerns, at bottom, relate to the fundamental fairness of a procedure. OSM believes that the rebuttable presumption will provide a fair process, for several reasons, including the following: first, in adopting a State program amendment, the State may specify a different standard for the angle where appropriate for conditions in the State; second, after amendment of the State program, the permittee may demonstrate that the presumption should apply to a different angle of draw on the particular site; third, in every case the regulatory authority must establish that the structures are within the angle of draw to which the presumption applies, that damage has occurred to the protected structure and that it was caused by earth movement; fourth, the permittee is in the best position to provide baseline information and information as to whether subsidence caused the damage, once damage is established; fifth, the decisionmaker must consider all relevant and reasonably available information; sixth, the presumption does not apply where access for a presubsidence survey pursuant to these rules was denied (and if access for a voluntary survey of presubsidence conditions is denied for an existing operation, the decisionmaker may consider those circumstances in deciding whether the presumption has been established); seventh, the presumption does not change the ultimate burden of proof in a determination; and eighth, administrative and judicial appeals procedures are available to all aggrieved parties.

Some commenters urge that OSM adopt a presumption of subsidence causation for damage to water supplies, similar to that proposed for damage to lands, structures, and features at 817.121(c)(4). Commenters stated that such a presumption should apply to

damage to water resources within the greater of a 60-degree angle of draw or 300 feet of the outer boundary of the underground coal mining operation. However, OSM did not propose such a presumption, and believes that water supply damage causation does not lend itself to such a presumption. OSM bases this conclusion in part on its belief that causation of damage to water supply from springs and wells can be far more complex than causation of damage to surface lands and structures, and can involve a potentially greater variety of geological and hydrological formations and dynamics including depth, lateral extent, and recharge of the affected supply. Therefore, OSM has not established such a presumption in this rulemaking.

However, OSM has concluded that the absence of a presumption of causation for replacement of affected water supplies will not inhibit the water supply owner's ability to receive water supply replacement. If the water supply has been contaminated, diminished, or interrupted by the underground mining operation, the permittee is required to promptly replace the affected supply. In the event that the permittee does not replace the water supply, and the water supply owner contacts the regulatory authority regarding water loss, the regulatory authority must investigate to determine if there is sufficient evidence to believe that the domestic, drinking, or residential water supply was adversely affected by subsidence from the underground mining operation and subsequently not promptly replaced by the permittee. If the regulatory authority determines that sufficient evidence exists that a protected water supply has been contaminated, diminished, or interrupted by the underground mining operation, then the regulatory authority will initiate appropriate enforcement action. In any such enforcement action, the burden of proving that the water supply was damaged by subsidence from the underground mining operation is not on the water supply owner, who may not have knowledge of geological conditions and the nature and timing of the mining activities. Rather the initial burden is on the regulatory authority to establish a prima facie case that the water supply was affected by the underground mining. Then the burden of going forward with evidence to rebut the prima facie case would shift to the permittee. The ultimate burden of proof is on the regulatory authority.

817.121(c)(5)

This section as proposed would have provided that, if material damage from subsidence occurs to land, structures, or

facilities protected under paragraphs (c)(1) through (c)(3) of this section, the regulatory authority would require the permittee to obtain additional performance bond in the amount of the estimated cost to repair the material damage from subsidence to the protected land, structures, or facilities. The permittee would have been required to obtain the additional bond within 90 days of the occurrence of damage unless repair or compensation is completed within that time frame, in which case no additional bond would be required. In response to comments, these proposed requirements are being modified in the final rule. The final rule ensures that replacement of water supplies protected under paragraph 817.41(j) is also addressed. Further, the final rule provides that if the permittee intends to repair the damage, the required additional bond would amount to the estimated cost of the repairs. If the permittee intends to compensate the owner, the additional bond would amount to the diminution in value of the protected land or structures. If the permittee will replace a protected water supply, the required additional bond would amount to the estimated costs to replace the protected water supply. Also, in response to comments, the final rule provides that, on a case-by-case basis, the 90-day period for posting bond can be extended for up to one year under certain circumstances. This can occur when the permittee demonstrates and the regulatory authority finds in writing that subsidence is not complete, that not all probable subsidence-related damage has occurred to lands or protected structures or that not all reasonably anticipated changes have occurred affecting the protected water supply. In such cases, it would be unreasonable to complete within 90 days the repair of subsidence damage or the replacement of protected water supplies.

Commenters assert that the proposal is not adequately explained and that the requirements would be difficult for some permittees to meet. Also, the rule fails to mention any procedure for the bond's release. Further the commenters argue that surety companies would be reluctant to post bonds for operations subject to the broad scope of the new rules. Without surety companies providing the bonds the permittees would be forced to finance the bonds themselves. This would place a severe financial burden on the permittee which would make it even more difficult for them to prevent or repair subsidence related damage.

OSM disagrees with the commenters that surety companies would be

reluctant to post the bonds provided for in this paragraph, and that the requirement to obtain additional bonding on a temporary basis would impose such a severe financial burden on the permittee so as to impede their ability to repair subsidence related damage. The current rules at 30 CFR Part 800 already require the permittee to adjust the amount of the bond when the costs of future reclamation increase or when a reclamation obligation is established; for example, when material damage from subsidence occurs. The final rule is intended to avoid incomplete reclamation by clarifying the application to actual subsidence damage of the requirement in 30 CFR 800.15(a) that the regulatory authority specify a period of time or a set schedule to increase the amount of bond when the cost of reclamation changes. Thus, this provision assures that funds are available in a timely fashion to cover the cost of repairs in case of default by the permittee and to encourage prompt repair through the use of a grace period. The final rule does not establish a time limit for repair but rather allows the permittee a 90-day grace period to perform repairs, during which time no additional bond need be posted. The obligation to post increased bond only applies 90 days after damage has occurred. It should be noted that under paragraph 800.14(c), if the liability insurance policy required under section 800.60 would provide coverage sufficient to fund the reclamation of subsidence damage, that insurance may be substituted for increased bond. Procedures for bond release are set forth in sections 800.17 and 800.40.

Commenters charge that the legislative intent behind the Energy Policy Act shows that although the idea of additional bonding for subsidence damage and water replacement was included in the House version of the Energy Policy Act, the provision was deleted in the final conference committee version and the proposed rule requiring additional bonding would be contrary to the legislative intent of Energy Policy Act.

The commenters also rely on case law that has found that bonding for subsidence would be a "highly speculative endeavor" and that a change to such an approach would require "significant new evidence." The commenters reference the decision of the court of appeals in *National Wildlife Fed'n v. Hodel*, 839 F.2d 694 (D.C.Cir. 1988). This decision affirmed the Secretary's explanation that because it is difficult to predict with reliability when and how severely subsidence damage to the surface will occur, it is reasonable

to issue a permit for underground mining without requiring the posted bond amount to reflect any bond amount for potential subsidence damage, provided that the bond amount could be adjusted upward after the damage began occurring. The court of appeals found that one of the distinct differences between surface and underground mining is the difficulty in accurately estimating the cost of repairing subsidence related material damage.

OSM does not agree with the commenters' interpretation of the legislative history of the Energy Policy Act or the cited case on this issue. As noted above, OSM believes the rule primarily clarifies the application of existing bonding requirements which require adjustment of the bond amount; thus, Congress may have deleted further language on this subject because it was not clearly needed. OSM concludes that the proposed rule is consistent with the case cited by commenters, because the proposed rule provides that the bond amount will be increased to cover required repair work *after* damage occurs, and only if the repair work is not to be completed within 90 days. At that point it is not a "highly speculative endeavor," since the damage will have occurred and estimates of repair costs can be reasonably established. Also, the permittee has control over the timing of repairs and can avoid the bond by repairing or compensating promptly. Thus, while OSM concurs in the rationale of the cited decision, as it concerns pre-subsidence bonding for anticipated subsidence damage, the decision is not applicable to the circumstances addressed in this rule. The proposed rule also provides substantial flexibility to the permittee, because it allows liability insurance proceeds to be applied to the repair effort. OSM believes this rule is consistent with SMCRA and is not inconsistent with any provisions of the Energy Policy Act.

Commenters allege that permanent repair of subsidence damage to structures and lands is seldom completed within 90 days. Potential damage to structures from tertiary settlement and from adjacent mining could delay repair for more than a year. Similarly, to minimize disruption to sowing or harvesting of crops, repair of drainage patterns in agricultural fields should be delayed until the entire field is subsided, and this is rarely possible within 90 days. The commenters argue that to impose additional bonding in such cases when repair cannot be completed within 90 days, accomplishes nothing but additional

financial burden on the permittee and encourages premature and substandard restoration of protected features. OSM has considered these arguments and has made some adjustment to the final rule. OSM believes that if delays in repair are likely, then normally bond amounts should be adjusted to ensure that funds will be available later to pay for the repairs, since delays increase the risk that permittee funds may not be available. However, OSM does not intend that the rule encourage inappropriate or premature restoration measures when subsidence related damage is not yet complete, so that subsequently the permittee would have to redo the repairs. Therefore, under the final rule the regulatory authority can extend the 90-day timeframe up to one year under limited circumstances as previously described.

Section 843.25—Direct Federal Enforcement for Repair of Subsidence Damage.

In response to comments asking for clarification as to how immediate enforcement of the Energy Policy Act meshes with the primacy scheme established by SMCRA, OSM is adding a new section 843.25, to provide procedures for initiating and terminating direct Federal enforcement as appropriate, for section 720 of SMCRA concerning subsidence damage caused by underground mining that occurred after October 24, 1992. Section 720(a) of SMCRA requires that "Underground coal mining operations conducted after the date of enactment of this section shall comply with each of the following requirements: * * *." In section 720(b), the Secretary is directed, within one year after the date of enactment of the Energy Policy Act, and after notice and opportunity for comment, to promulgate final regulations to implement subsection 720(a). Thus, the requirements of subsection 720(a) to promptly repair, replace, or compensate were made effective immediately upon enactment of the provision, but the Secretary was directed to adopt implementing regulations during the following year.

843.25(a)

Under paragraph (a) of the final rule, within 120 days from the publication of the rules, OSM will determine for each State with an approved State regulatory program, what enforcement procedures will apply for purposes of implementing SMCRA section 720(a) and implementing regulations. The specific performance standards implementing section 720(a) are set forth in paragraphs 817.41(j) and 817.121(c)(2). OSM will

determine for each such State whether (1) there will be direct interim Federal enforcement of the Energy Policy Act and implementing performance standards, for some or all surface coal mining operations; or (2) State enforcement will occur, backed up by OSM using the oversight procedures of paragraphs 843.11 and 843.12(a)(2); or (3) a combination of direct Federal enforcement and State enforcement will occur. As part of the determination process, (4) OSM will consult with each affected State and provide opportunity for public comment. OSM will publish its determination in the **Federal Register**.

In the preamble to the proposed rules (58 FR 50182) OSM "concluded that Congress intended new section 720(a) to immediately supersede inconsistent State program performance standards, by operation of law, as of the effective date of the final Federal rules." OSM also stated in the preamble to the proposed rule, "OSM believes it is essential to provide as orderly a transition as possible for implementing the Energy Policy Act." Id. OSM believes it is also essential to give the fullest possible effect to the State primacy scheme of SMCRA, in implementing the provisions of section 720, including the effective date. Upon further reflection, OSM has concluded that it is not clear from the legislation or legislative history, how Congress intended that section 720 was to be implemented, in light of existing SMCRA provisions for State primacy. Thus, OSM has a certain amount of flexibility in implementing section 720.

After weighing these considerations, OSM intends to implement section 720 promptly, but will pursue federal enforcement without undermining State primacy under SMCRA. This decision reflects OSM's general policy of developing a shared commitment with the States in enforcing the Act. To achieve this balance, OSM intends that the consultation and comment process provided for in paragraph 843.25(a) will allow OSM to evaluate affected States' enforcement authority and State plans for implementing section 720, to determine to what extent OSM can rely on state primacy, and ensure prompt compliance with section 720, while complying with the requirement for implementing rules. Once OSM has consulted with the States as to implementation of section 720, OSM will have the information necessary to determine the appropriate enforcement approach for each State. OSM anticipates that some States may have no underground mining, and that some states may have no complaints of

damage from underground mining that would be subject to section 720. Some States are already in the process of adopting provisions like section 720, and may promulgate such provisions on or shortly after the effective date of these regulations. Providing for direct Federal enforcement in such States may be unnecessary. Providing for direct Federal enforcement could be unnecessary in any States that adopt provisions covering mining after October 24, 1992, if the State provisions are effective on or will be shortly after the effective date of these regulations. However, some States may take two or three years under Part 732 to adopt State program amendments. For States that do take such an extended time to adopt implementing regulatory program provisions, OSM may well determine it necessary to provide direct Federal enforcement for any damage caused by underground mining that occurs after October 24, 1992, until damage caused by underground mining is covered by such a State provision. OSM also anticipates that a number of States may not authorize enforcement of provisions analogous to section 720, as of October 24, 1992. Kentucky has already informally advised OSM that it does not anticipate providing for enforcement covering mining that occurred before July, 1994. In those States, to ensure compliance with section 720(a) OSM will provide direct Federal enforcement for any claims of damage caused by underground mining which occurs after October 24, 1992, and predates State program amendment. Such Federal enforcement should cause no surprise to permittees, who have been aware of their obligations since passage of the Energy Policy Act in 1992.

One commenter opined that direct enforcement was unnecessary, and that existing procedures for State program amendments would be sufficient to ensure appropriate enforcement. OSM does not agree. As set out above, OSM believes that direct Federal enforcement could be necessary in some States, in order to ensure that prompt compliance is provided with minimum disruption of existing procedures for State primacy. The procedures established in paragraph 843.25(a) will allow for State-by-State determination after appropriate input from affected persons concerning the necessity for direct Federal enforcement.

843.25(b)

Paragraph (b) clarifies how direct Federal enforcement procedures will apply, to the extent they are initiated, and how direct Federal enforcement will be phased out, once State programs

are amended to address section 720 and the implementing Federal regulations.

Under paragraph (b)(1) of the final rule, upon a determination by OSM under paragraph (a) that direct Federal enforcement is necessary, paragraph 817.121(c)(2) will apply directly to surface coal mining operations in States with an approved State regulatory program. Paragraph 817.121(c)(2) will apply directly to failure to repair or compensate for subsidence-related material damage to occupied residential dwellings and related structures and non-commercial buildings, and paragraph 817.41(j) will apply directly to failure to replace a contaminated, diminished, or interrupted drinking, domestic, or residential water supply. Both paragraphs apply directly to damage caused by underground mining activities that occurred after October 24, 1992.

Under paragraph (b)(2), upon a determination by OSM under paragraph (a) that direct Federal enforcement is necessary, the provisions of paragraph 843.12(a)(2) will not apply to direct Federal enforcement implementing paragraphs 817.41(j) or 817.121(c)(2). When, on the basis of a Federal inspection pursuant to paragraph (b), an authorized representative determines a violation exists of paragraph 817.41(j) or 817.121(c)(2), the authorized representative will issue a notice of violation or cessation order, as appropriate. Paragraph 843.12(a)(2) provides for a ten-day notice (TDN) to a State, and opportunity for the State to take appropriate action or show good cause for failure to act, before an authorized representative would issue a notice of violation or cessation order.

Under paragraph (b)(3), paragraph (b) providing for direct Federal enforcement will remain effective in a State with an approved State regulatory program until approval, pursuant to Part 732, of provisions adopted by the State consistent with paragraphs 817.41(j) and 817.121(c)(2). Upon approval of those provision, paragraph (b) will remain effective only for violations of paragraphs 817.41(j) and 817.121(c)(2) that are not regulated by the State.

Some commenters request clarification as to how existing procedures for ensuring State primacy in regulatory program implementation will apply under the proposed rule. These commenters allege that OSM has no authority to ignore existing TDN and State program amendment procedures which ensure State primacy in enforcement of SMCRA and ensure that the approved State regulatory program will apply to mining operations in the State until established procedures are

followed to require State program changes. Other commenters allege that direct Federal enforcement would be inconsistent with SMCRA. OSM does not agree. OSM believes that the limited direct enforcement procedures it is adopting are authorized by both section 720 and section 201(c) of SMCRA. Congress provided no specific statement as to how OSM was to ensure prompt compliance by underground coal mining operations, for damage caused by any underground mining after October 24, 1992. Congress did recognize that to develop such a regulatory scheme would require rulemaking, and provided for such rulemaking in section 720. Enforcement of section 720 will be required to apply to mining that occurs after October 24, 1992. OSM expects that some number of States will not provide implementation of section 720 for mining that has occurred after October 24, 1992, but before State program amendment, and that such States may prefer OSM to carry that enforcement burden. Based on past experience, OSM also expects that the normal process for State regulatory program amendment and OSM approval of State program amendments could take as much as two or three years, after this rule is finalized. Thus, if only State program amendment procedures were followed, it could be as long as five years after enactment of section 720 before some States actually enforced the section. OSM has concluded that following the routine procedures for State program amendment and for TDN's in implementing these rules, would frustrate the requirement for prompt repair, replacement, or compensation for all damage caused by underground mining occurring after October 24, 1992. In reaching this conclusion, OSM considered preliminary information as to complaints already filed with State regulatory authorities alleging violations of section 720. OSM requested such information from several States in which a substantial number of underground coal mining operations are permitted. The States of Virginia, Pennsylvania, West Virginia, and Kentucky have already received a total of over 300 complaints of violations of section 720. Therefore, OSM has concluded that direct Federal enforcement as outlined above, is consistent with, and essential to a reasonable implementation of section 720. However, in response to comments expressing concern about disruption of existing procedures, OSM has sought to provide a more limited direct enforcement process which will cause

less disruption of existing procedures in each State.

OSM believes that SMCRA section 201(c)(2) also authorizes this approach. Section 201(c)(2) provides that the Secretary, acting through OSM, will "publish and promulgate such rules and regulations as may be necessary to carry out the purposes and provisions of this Act." Since Congress did not address the issue of how OSM was to meet the mandate for prompt compliance as of October 24, 1992, the Secretary is using his rulemaking authority to provide for direct Federal enforcement where reasonably necessary to implement Congress' mandate for prompt compliance. OSM has concluded that the existing program amendment and enforcement process may not be sufficient to ensure prompt compliance with the statute, and has decided to adopt rules providing for direct Federal enforcement as necessary to ensure prompt compliance with section 720(a). Commenters argue that the proposal to provide for direct Federal enforcement ignores Federal case law which indicates that, as a general proposition, the State program, not SMCRA, is the law within the State. OSM recognizes that, under existing rules implementing SMCRA, States with approved regulatory programs have primary responsibility for implementing SMCRA, based on the approved program. However, in this rule OSM has carved out a limited exception to the general proposition, to the extent necessary to give reasonable force and effect to section 720, while maintaining so far as possible State primacy procedures. OSM believes that the process adopted in this final rule is consistent with and authorized by Congress under the Energy Policy Act, and that case law interpreting other provisions of SMCRA is not necessarily dispositive.

One commenter alleges that OSM had not provided sufficient information about enforcement procedures to enable commenters to understand or comment on the procedures for direct enforcement. OSM does not agree. OSM provided sufficient information in the proposed rule to indicate that, in the interests of ensuring prompt compliance, the regulations would be made immediately and directly enforceable. OSM thereby informed all interested persons that OSM did not expect to postpone enforcement pending State program amendment. And OSM believes that neither industry nor State regulatory authorities will be prejudiced by such immediate enforcement, since all interested persons were put on notice by the

statute, as well as the proposed rule, that prompt compliance would be required as of October 24, 1992. If there are concerns about opportunity to understand and comment on specific procedures for immediate enforcement, OSM believes that any such concerns will be adequately addressed by the process for consultation and opportunity to comment on appropriate measures for each State.

Other commenters allege that OSM has failed to provide timely rulemaking implementing section 720, and that OSM must promulgate an interim final rule which makes effective for all Federal and State programs, including the Indian lands program, the requirements of section 720, effective October 24, 1992. These commenters further argue that all permits should be modified to include the requirements of section 720 as permit conditions, and that all permitting authorities should be required to require collection and analysis of the data necessary to implement section 720. OSM does not agree. OSM had earlier decided that such an interim final rule was not appropriate, because of OSM's desire to avoid any unnecessary impairment of State primacy. OSM believes that reasonably prompt compliance will be assured in States with approved State regulatory programs under the procedures OSM is adopting, which will provide expeditious direct Federal enforcement where determined necessary. And an interim final rule will not be necessary for Federal program lands or Indian lands because, as discussed below, these final rules are incorporated by reference in the regulatory programs for such lands, and will apply upon the effective date of these rules. Further, OSM is following its normal rulemaking procedures, consistent with the APA. OSM believes that in section 720(b) Congress contemplated notice-and-comment rulemaking as an appropriate mechanism for implementing section 720(a). Given the difficult and controversial issues in this rulemaking, OSM believes it is important to assure full and fair opportunity for all interested persons to comment, and opportunity for OSM to consider all comments before OSM adopts implementing rules. OSM also believes the procedures set out in these rules will assure reasonably timely compliance with section 720 with less uncertainty and less disruption of the existing process than would be caused by the actions advocated by these commenters.

OSM concludes that there will be no prejudice to the interests of

underground coal mine operations to the extent direct Federal enforcement will occur. The industry was on notice that section 720 does specifically require that underground mine operations promptly repair, replace, or compensate for subsidence damage to protected features. The obligation was not changed by this rulemaking. The only question was the mechanism by which the requirement for prompt action would be enforced. And, since Federal enforcement can occur without delay for State program amendments, OSM believes the direct Federal enforcement process will work to the advantage of all interested persons. In cases where direct Federal enforcement is instituted, any evidentiary issues in enforcement should be more readily resolved, because facts will be fresher and more readily recalled than they would be after the delay required for amendment of a State program. In such cases the question whether damage was caused by subsidence from an underground mining operation may be easier to resolve under direct Federal enforcement, than it would be later after the delays required to implement an amended State program.

Effect in Federal Program States and on Indian Lands

The rules adopted today will be applicable through cross-referencing in those States with Federal programs and on Indian lands. The States with Federal programs are California, Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, and Washington. The Federal programs for these States appear at 30 CFR Parts 905, 910, 912, 921, 922, 933, 937, 939, 941, 942, and 947, respectively. The Indian lands program appears at 30 CFR Part 750. In accordance with 30 CFR 774.11, with respect to existing operations, OSM will notify permittees of the need to revise their permits to conform with the changes to 30 CFR 817.41(j) and 817.121(c).

Effect on State Programs

The performance standards set forth in 30 CFR 817.41(j) and 817.121(c)(2) are required to implement new SMCRA sections 720(a)(1) and (2). New SMCRA section 720(a) requires that operations conducted after October 24, 1992 comply with these provisions.

In the interim pending direct enforcement by a State, enforcement of paragraphs 817.121(c)(2), 817.121(c)(4), and 817.41(j) of this rule will be provided as set forth in section 843.25 of this rulemaking. For purposes of such interim enforcement, the definitions

adopted in this rulemaking at section 701.5 and the presumption at paragraph 817.121(c)(4) will be effective and enforced on the same date as the provisions of paragraphs 817.41(j) and 817.121(c)(2).

For all other provisions in the final rule, OSM will follow established procedures for notice of required changes in State regulatory programs. The additional provisions will become effective upon the adoption of counterpart State regulatory program provisions in primacy States. OSM will evaluate permanent State regulatory programs approved under § 503 of the Act to determine whether any changes in these programs will be necessary. If the Director determines that certain State program provisions should be amended in order to be made no less effective than the revised Federal rules, the individual States will be notified in accordance with the provisions of 30 CFR 732.17.

III. Procedural Matters

Federal Paperwork Reduction Act

The collections of information contained in this rule have been approved by the Office of Management and Budget under 44 U.S.C. 3501 et seq. and assigned clearance numbers 1029-0039 and 1029-0048.

Executive Order 12866

This rule has been reviewed under Executive Order 12866.

Benefits

While the cost of the rulemaking can be estimated, the benefits are not readily or completely quantifiable. Water loss and structural damage caused by subsidence from underground coal mining can have very disruptive personal and financial impacts, particularly to middle class and rural landowners. The benefit of avoiding the personal consequences, including those associated with health and safety, is difficult to assess. However, one of the clear benefits of the rule is that the responsibility to repair property damage and replace lost water supplies is shifted from property owners suffering the damage to the mining operations that cause the damage.

OSM's regulations would require replacement of the landowner's domestic water supply in a timely manner. The surface landowner would have water replacement, as necessary, without assuming any additional costs.

Under the regulations, landowners are afforded additional protections for their homes and domestic water supplies. The process for establishing causation

between mining and damage to homes and land is simplified. Also, the rule provides that subsidence damage within a specified area associated with a coal mining operation will be presumed to have been caused by that operation, and that the operator will have the burden of refuting such a presumption. This shifts the burden of providing evidence from the property owner to the operator who would have better information as to the nature and timing of the mining activities.

The rule also provides the property owner with an option to receive compensation in a lump sum payment as an alternative to annual payments for operation and maintenance costs for a permanent water supply. If agreed to by the landowner, a one-time payment based on the present worth of the increased annual operating costs for a period of time agreed upon by the landowner and the coal mine operator would fulfill the operator's obligation. Such a payment plan, rather than annual or other periodic payments, would be preferable to the property owner in those cases where the operator might encounter financial difficulties or simply go out of business.

Property owners and coal mine operators would benefit from the requirement to conduct a pre-mine survey. The survey must inventory and document the pre-mining condition of the potentially affected structures and renewable resource lands. Under this requirement, both the surface owner and the mine operator are provided with a more accurate record of the status of the homes and land prior to mining. Hence, the record would be a fairer basis for enforcement in the event of subsidence.

Estimated Costs

The final rule requires all underground coal mining operations promptly to repair or compensate for any material damage to non-commercial buildings and occupied residential dwellings or related structures as a result of subsidence due to underground coal mining operations. Permittees in both primacy States and Federal program States, as well as on Indian lands, are required to comply with this provision for operations conducted after October 24, 1992. This provision is necessary to implement new SMCRA section 720(a)(1) of the Energy Policy Act of 1992.

The estimated cost to coal operators to meet this requirement of the Energy Policy Act is \$12.6 million. Most states adopted provisions to implement this requirement following passage of the 1992 Act. These states account for \$11.7 million of the \$12.6 million estimated

cost. Other states will need to promulgate implementing provisions on or shortly after the effective date of these regulations. OSM estimates that the cost to coal operators to meet this requirement in those additional states will be \$900,000.

The final rule also requires the permittee to promptly replace any drinking, domestic or residential water supply that is contaminated, diminished or interrupted by underground mining activities conducted after October 24, 1992, if the affected well or spring was in existence prior to the date the regulatory authority received the permit application for the activities causing the loss, contamination or interruption. This requirement that the permittee promptly replace any drinking, domestic, or residential water supplies that have been adversely affected by underground activities is necessary to implement the provision of new SMCRA section 720(a)(2) of the Energy Policy Act of 1992.

Under the regulations, the operator would pay the capital costs of installing the replacement water supply. For example, if the use of well water can continue, the operator would pay the cost of designing, drilling, and completing a new or deeper well; purchasing and installing a pump; and/or purchasing and installing a treatment system, as necessary. If the replacement water supply involves a hook-up to a public or private water supply system, the operator would pay the hook-up costs, including fees, purchase of equipment and supplies, and construction. If a temporary water supply is necessary before the permanent replacement water supply is provided, the operator would pay the cost of providing the temporary water supply.

The estimated cost to coal operators to meet this requirement of the Energy Policy Act is \$11.2 million. Most states adopted provisions to implement this requirement since passage of the 1992 Act. These states account for \$9.5 million of the \$11.2 million estimated cost. Other states will need to promulgate implementing provisions on or shortly after the effective date of these regulations. OSM estimates that the cost to coal operators to meet this requirement in those additional states will be \$1.7.

In addition to the above requirements, OSM believes that the following provisions with an estimated cost to coal operators of \$2.7 million were essential to implement the requirements of the Energy Policy Act.

- Pre-Mine Survey: an explicit requirement to establish and document

the location and pre-mining condition of protected structures and lands, and the location and pre-mining quantity and quality of protected water supplies, is essential to establish a sufficient baseline against which the effects of subsidence may be measured and to ensure full implementation of SMCRA sections 516 and 720. Estimated cost to coal operators is \$1.6 million.

- Pre-subsidence Survey and Subsidence Control Plan: majority of applicants provide the survey, including map, and the subsidence control plan under the existing regulations; cost corresponds to those operators not currently providing the information. Estimated cost to coal operators for both requirements is \$65,000.

- Presumption of Causation: presumes that damage was caused by underground coal mining operations; the operator must bear the cost of rebutting the presumption. Estimated cost to coal operators is \$420,000.

- Additional Bonding: requirement to increase bond coverage within 90 days of the occurrence of any damage that is not repaired. Estimated cost to coal operators is \$620,000.

The total estimated cost to coal operators to meet the subsidence control provisions in the Energy Policy Act of 1992 is \$26.5 million. However, because many states have already implemented provisions of the Act accounting for an estimated cost of \$21.2 million, the cost that will be incurred by coal operators resulting from promulgation of this final rule is estimated to be \$5.3 million.

There are a number of provisions discussed in the proposed rule that have not been adopted in the final rule. A significant change is the decision by OSM not to adopt the proposed requirement to replace agricultural, commercial and industrial water supplies. OSM agreed with commenters that these provisions of the proposed rule went beyond the requirements of the Energy Policy Act. OSM estimates that these provisions not included in the final rule would have cost coal operators more than \$7 million. Another proposed requirement that all facilities be covered was not adopted in the final rule. However, this change does not appreciably alter the cost to coal operators of meeting the requirements in this rule.

Regulatory Flexibility Act

The DOI certifies that this rule would not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.* This determination is based on the fact that the revisions will have the greatest effect on underground

mining operations, and only a small number of small entities mine coal by underground methods. For the purposes of this determination, a small entity is considered anyone whose total annual production at all locations does not exceed 300,000 tons.

National Environmental Policy Act

OSM has prepared a final environmental assessment (EA), and has made a finding that the rule will not significantly affect the quality of the human environment under section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4332(2)(C). A finding of no significant impact (FONSI) has been approved in accordance with OSM procedures under NEPA. The EA and FONSI are on file in the OSM Administrative Record, Room 660, 800 North Capitol Street, Washington, DC.

Executive Order 12778 on Civil Justice Reform

This rule has been reviewed under the applicable standards of section 2(b)(2) of Executive Order 12778, "Civil Justice Reform" (56 FR 55195). In general, the requirements of section 2(b)(2) are covered by the preamble discussion of this rule. Individual elements of the order are addressed below:

A. What would be the preemptive effect, if any, to be given to the regulation?

Section 843.25 sets out a procedure by which OSM may determine on a State-by-State basis that direct Federal enforcement is required in States with approved regulatory programs, in the interim before those programs are amended to implement section 720, to ensure prompt compliance with section 720 of SMCRA, 30 U.S.C. 1309a, and implementing Federal regulations. Any such action would be instituted only upon a determination that in a particular State the action was necessary on an interim basis, to ensure the congressionally mandated prompt compliance with SMCRA section 720, for underground operations conducted after October 24, 1992. This procedure is discussed in the preamble discussion of section 843.25. The other provisions in this rulemaking would have the same preemptive effect as other standards adopted pursuant to SMCRA. To retain primacy, States have to adopt and apply standards for their regulatory programs that are no less effective than those set forth in OSM's regulations. Any State law that is inconsistent with or that would preclude implementation of the regulation would be subject to preemption under SMCRA section 505 and implementing regulations at 30 CFR

730.11. To the extent that the regulation would result in preemption of State law, the provisions of SMCRA are intended to preclude inconsistent State laws and regulations. This approach is established in SMCRA, and has been judicially affirmed. See *Hodel v. Virginia Surface Mining and Reclamation Ass'n*, 452 U.S. 264 (1981).

B. What would be the effect of the regulation on existing Federal law or regulation, if any, including all provisions repealed or modified?

The regulation would modify the implementation of SMCRA as described herein, and is not intended to modify the implementation of any other Federal statute. The preceding discussion of the action specifies the Federal regulatory provisions that are affected by the revision.

C. Would the regulation provide a clear and certain legal standard for affected conduct rather than a general standard, while promoting simplification and burden reduction?

The standards established by this rule are as clear and certain as practicable, given the complexity of the topics covered and the mandates of SMCRA.

D. What would be the retroactive effect, if any, to be given to the regulation?

The Energy Policy Act amended SMCRA by adding a new section 720, 30 U.S.C. 1309a, requiring that underground coal mine operations promptly replace certain adversely affected water supplies and repair or compensate for subsidence damage to specified structures. The requirements are effective October 24, 1992, and apply to underground coal mining operations after that date. Section 720 also required OSM to adopt implementing regulations thereafter. This rulemaking includes provisions to implement those requirements. Thus, those provisions do not create any new retroactive requirements to replace, repair, or compensate; but rather implement the effective date established for these requirements by the Energy Policy Act. Implementing provisions were previously discussed in the preamble.

E. Are administrative proceedings required before parties may file suit in court? Which proceedings apply? Is the exhaustion of administrative remedies required?

No administrative proceedings would be required before parties may file suit in court challenging the provisions of the revision under section 526(a) of SMCRA, 30 U.S.C. 1276(a). Prior to any judicial challenge to the application of the rule, however, administrative procedures must be exhausted.

Applicable administrative procedures may be found at 43 CFR Part 4.

F. Would the action define key terms, either explicitly or by reference to other regulations or statutes that explicitly define those items?

Terms which are important to the understanding of the action are set forth in 30 CFR 701.5.

G. Would the regulation address other important issues affecting clarity and general draftsmanship of regulations set forth by the Attorney General, with the concurrence of the Director of the Office of Management and Budget, that are determined to be in accordance with the purposes of the Executive Order?

The Attorney General and the Director of the Office of Management and Budget have not issued any guidance on this requirement.

Agency Concurrence

Section 516(a) of the Act requires that, with regard to rules directed toward the surface effects of underground mining, OSM must obtain written concurrence from the head of the department which administers the Federal Mine Safety and Health Act of 1977, the successor to the Federal Coal Mine Health and Safety Act of 1969. OSM has obtained the written concurrence of the Assistant Secretary for Mine Safety and Health, U.S. Department of Labor.

Author

The principal author of this regulation is Nancy R. Broderick, Branch of Federal and Indian Programs, Office of Surface Mining Reclamation and Enforcement, 1951 Constitution Avenue, N.W., Washington, D.C. 20240; telephone (202) 208-2564.

List of Subjects

30 CFR Part 701

Law enforcement, Surface mining, Underground mining.

30 CFR Part 784

Reporting and recordkeeping requirements, Underground mining.

30 CFR Part 817

Environmental protection, Reporting and recordkeeping requirements, Underground mining.

30 CFR Part 843

Administrative practice and procedure, Direct federal enforcement for repair of subsidence damage, Law enforcement, Reporting and recordkeeping requirements, Surface mining, Underground mining.

Dated: January 5, 1995.

Bob Armstrong,

Assistant Secretary—Land and Minerals Management.

Accordingly, 30 CFR Parts 701, 784, 817, and 843 are amended as set forth below.

SUBCHAPTER A—GENERAL

PART 701—PERMANENT REGULATORY PROGRAM

1. The authority citation for Part 701 is revised to read as follows:

Authority: 30 U.S.C. 1201 *et seq.*, as amended.

2. Section 701.5 is amended by adding alphabetically definitions of “drinking, domestic or residential water supply,” “material damage,” “non-commercial building,” “occupied residential dwelling and structures related thereto,” and “replacement of water supply” to read as follows:

§ 701.5 Definitions.

* * * * *

Drinking, domestic or residential water supply means water received from a well or spring and any appurtenant delivery system that provides water for direct human consumption or household use. Wells and springs that serve only agricultural, commercial or industrial enterprises are not included except to the extent the water supply is for direct human consumption or human sanitation, or domestic use.

* * * * *

Material damage, in the context of §§ 784.20 and 817.121 of this chapter, means:

(a) Any functional impairment of surface lands, features, structures or facilities;

(b) Any physical change that has a significant adverse impact on the affected land's capability to support any current or reasonably foreseeable uses or causes significant loss in production or income; or

(c) Any significant change in the condition, appearance or utility of any structure or facility from its pre-subsidence condition.

* * * * *

Non-commercial building means any building, other than an occupied residential dwelling, that, at the time the subsidence occurs, is used on a regular or temporary basis as a public building or community or institutional building as those terms are defined in § 761.5 of this chapter. Any building used only for commercial agricultural, industrial, retail or other commercial enterprises is excluded.

* * * * *

Occupied residential dwelling and structures related thereto means, for purposes of §§ 784.20 and 817.121, any building or other structure that, at the time the subsidence occurs, is used either temporarily, occasionally, seasonally, or permanently for human habitation. This term also includes any building, structure or facility installed on, above or below, or a combination thereof, the land surface if that building, structure or facility is adjunct to or used in connection with an occupied residential dwelling. Examples of such structures include, but are not limited to, garages; storage sheds and barns; greenhouses and related buildings; utilities and cables; fences and other enclosures; retaining walls; paved or improved patios, walks and driveways; septic sewage treatment facilities; and lot drainage and lawn and garden irrigation systems. Any structure used only for commercial agricultural, industrial, retail or other commercial purposes is excluded.

* * * * *

Replacement of water supply means, with respect to protected water supplies contaminated, diminished, or interrupted by coal mining operations, provision of water supply on both a temporary and permanent basis equivalent to premining quantity and quality. Replacement includes provision of an equivalent water delivery system and payment of operation and maintenance costs in excess of customary and reasonable delivery costs for premining water supplies.

(a) Upon agreement by the permittee and the water supply owner, the obligation to pay such operation and maintenance costs may be satisfied by a one-time payment in an amount which covers the present worth of the increased annual operation and maintenance costs for a period agreed to by the permittee and the water supply owner.

(b) If the affected water supply was not needed for the land use in existence at the time of loss, contamination, or diminution, and if the supply is not needed to achieve the postmining land use, replacement requirements may be satisfied by demonstrating that a suitable alternative water source is available and could feasibly be developed. If the latter approach is selected, written concurrence must be obtained from the water supply owner.

* * * * *

SUBCHAPTER G—SURFACE COAL MINING AND RECLAMATION OPERATIONS PERMITS AND COAL EXPLORATION SYSTEMS UNDER REGULATORY PROGRAMS

PART 784—UNDERGROUND MINING PERMIT APPLICATIONS—MINIMUM REQUIREMENTS FOR RECLAMATION AND OPERATION PLAN

3. The authority citation for Part 784 is revised to read as follows:

Authority: 16 U.S.C. 470 *et seq.*, 30 U.S.C. 1201 *et seq.* as amended.

4. Section 784.10 is revised as follows:

§ 784.10 Information collection.

(a) The collections of information contained in Part 784 have been approved by Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0039. The information will be used to meet the requirements of 30 U.S.C. 1211(b), 1251, 1257, 1258, 1266, and 1309a. The obligation to respond is required to obtain a benefit.

(b) Public reporting burden for this information is estimated to average 513 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

5. In Section 784.14 paragraph (e)(3)(ii) is amended by removing the word "and"; (e)(3)(iii)(E) is amended by removing the period and adding a semicolon in its place; and paragraph (e)(3)(iv) is added as follows:

§ 784.14 Hydrologic information.

* * * * *

(e) * * *

* * * * *

(3) * * *

(iv) Whether the underground mining activities conducted after October 24, 1992 may result in contamination, diminution or interruption of a well or spring in existence at the time the permit application is submitted and used for domestic, drinking, or residential purposes within the permit or adjacent areas.

* * * * *

6. Section 784.20 is revised to read as follows:

§ 784.20 Subsidence control plan.

(a) *Pre-subsidence survey.* Each application must include:

(1) A map of the permit and adjacent areas at a scale of 1:12,000, or larger if determined necessary by the regulatory authority, showing the location and type

of structures and renewable resource lands that subsidence may materially damage or for which the value or reasonably foreseeable use may be diminished by subsidence, and showing the location and type of drinking, domestic, and residential water supplies that could be contaminated, diminished, or interrupted by subsidence.

(2) A narrative indicating whether subsidence, if it occurred, could cause material damage to or diminish the value or reasonably foreseeable use of such structures or renewable resource lands or could contaminate, diminish, or interrupt drinking, domestic, or residential water supplies.

(3) A survey of the condition of all non-commercial buildings or occupied residential dwellings and structures related thereto, that may be materially damaged or for which the reasonably foreseeable use may be diminished by subsidence, within the area encompassed by the applicable angle of draw; as well as a survey of the quantity and quality of all drinking, domestic, and residential water supplies within the permit area and adjacent area that could be contaminated, diminished, or interrupted by subsidence. If the applicant cannot make this survey because the owner will not allow access to the site, the applicant will notify the owner, in writing, of the effect that denial of access will have as described in § 817.121(c)(4) of this chapter. The applicant must pay for any technical assessment or engineering evaluation used to determine the pre-mining condition or value of such non-commercial buildings or occupied residential dwellings and structures related thereto and the quantity and quality of drinking, domestic, or residential water supplies. The applicant must provide copies of the survey and any technical assessment or engineering evaluation to the property owner and regulatory authority.

(b) *Subsidence control plan.* If the survey conducted under paragraph (a) of this section shows that no structures, or drinking, domestic, or residential water supplies, or renewable resource lands exist, or that no material damage or diminution in value or reasonably foreseeable use of such structures or lands, and no contamination, diminution, or interruption of such water supplies would occur as a result of mine subsidence, and if the regulatory authority agrees with this conclusion, no further information need be provided under this section. If the survey shows that structures, renewable resource lands, or water supplies exist and that subsidence could cause material damage or diminution in value

or reasonably foreseeable use, or contamination, diminution, or interruption of protected water supplies, or if the regulatory authority determines that damage, diminution in value or foreseeable use, or contamination, diminution, or interruption could occur, the application must include a subsidence control plan that contains the following information:

(1) A description of the method of coal removal, such as longwall mining, room-and-pillar removal or hydraulic mining, including the size, sequence and timing of the development of underground workings;

(2) A map of the underground workings that describes the location and extent of the areas in which planned-subsidence mining methods will be used and that identifies all areas where the measures described in paragraphs (b)(4), (b)(5), and (b)(7) of this section will be taken to prevent or minimize subsidence and subsidence-related damage; and, when applicable, to correct subsidence-related material damage;

(3) A description of the physical conditions, such as depth of cover, seam thickness and lithology of overlaying strata, that affect the likelihood or extent of subsidence and subsidence-related damage;

(4) A description of the monitoring, if any, needed to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce or correct material damage in accordance with § 817.121(c) of this chapter;

(5) Except for those areas where planned subsidence is projected to be used, a detailed description of the subsidence control measures that will be taken to prevent or minimize subsidence and subsidence-related damage, such as, but not limited to:

(i) Backstowing or backfilling of voids;

(ii) Leaving support pillars of coal;

(iii) Leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving coal in place; and

(iv) Taking measures on the surface to prevent or minimize material damage or diminution in value of the surface;

(6) A description of the anticipated effects of planned subsidence, if any;

(7) For those areas where planned subsidence is projected to be used, a description of methods to be employed to minimize damage from planned subsidence to non-commercial buildings and occupied residential dwellings and structures related thereto; or the written consent of the owner of the structure or

facility that minimization measures not be taken; or, unless the anticipated damage would constitute a threat to health or safety, a demonstration that the costs of minimizing damage exceed the anticipated costs of repair;

(8) A description of the measures to be taken in accordance with §§ 817.41(j) and 817.121(c) of this chapter to replace adversely affected protected water supplies or to mitigate or remedy any subsidence-related material damage to the land and protected structures; and

(9) Other information specified by the regulatory authority as necessary to demonstrate that the operation will be conducted in accordance with § 817.121 of this chapter.

SUBCHAPTER K—PERMANENT PROGRAM PERFORMANCE STANDARDS

PART 817—PERMANENT PROGRAM PERFORMANCE STANDARDS—UNDERGROUND MINING ACTIVITIES

7. The authority citation for Part 817 is revised to read as follows:

Authority: 30 U.S.C. 1201 *et seq.*, as amended.

8. Section 817.10 is revised as follows:

§ 817.10 Information collection.

(a) The collections of information contained in Part 817 have been approved by Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0048. The information will be used to meet the requirements of 30 U.S.C. 1211, 1251, 1266, and 1309a which provide, among other things, that permittees conducting underground coal mining operations will meet the applicable performance standards of the Act. This information will be used by the regulatory authority in monitoring and inspecting underground mining activities. The obligation to respond is required to obtain a benefit.

(b) Public reporting burden for this information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

9. In § 817.41, paragraph (j) is added to read as follows:

§ 817.41 Hydrologic balance protection.

* * * * *

(j) *Drinking, domestic or residential water supply.* The permittee must promptly replace any drinking, domestic or residential water supply that is contaminated, diminished or interrupted by underground mining

activities conducted after October 24, 1992, if the affected well or spring was in existence before the date the regulatory authority received the permit application for the activities causing the loss, contamination or interruption. The baseline hydrologic information required in §§ 780.21 and 784.14 of this chapter and the geologic information concerning baseline hydrologic conditions required in §§ 780.21 and 784.22 of this chapter will be used to determine the impact of mining activities upon the water supply.

10. In § 817.121, paragraphs (a) and (c) are revised to read as follows:

§ 817.121 Subsidence control.

(a) *Measures to prevent or minimize damage.* (1) The permittee must either adopt measures consistent with known technology that prevent subsidence from 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 that provides for planned subsidence in a predictable and controlled manner.

(2) If a permittee employs mining technology that provides for planned subsidence in a predictable and controlled manner, the permittee must take necessary and prudent measures, consistent with the mining method employed, to minimize material damage to the extent technologically and economically feasible to non-commercial buildings and occupied residential dwellings and structures related thereto except that measures required to minimize material damage to such structures are not required if:

(i) The permittee has the written consent of their owners or

(ii) Unless the anticipated damage would constitute a threat to health or safety, the costs of such measures exceed the anticipated costs of repair.

(3) Nothing in this part prohibits the standard method of room-and-pillar mining.

* * * * *

(c) *Repair of damage.*

(1) *Repair of damage to surface lands.* The permittee must correct any material damage resulting from subsidence caused to surface lands, to the extent technologically and economically feasible, by restoring the land to a condition capable of maintaining the value and reasonably foreseeable uses that it was capable of supporting before subsidence damage.

(2) *Repair or compensation for damage to non-commercial buildings and dwellings and related structures.* The permittee must promptly repair, or

compensate the owner for, material damage resulting from subsidence caused to any non-commercial building or occupied residential dwelling or structure related thereto that existed at the time of mining. If repair option is selected, the permittee must fully rehabilitate, restore or replace the damaged structure. If compensation is selected, the permittee must compensate the owner of the damaged structure for the full amount of the decrease in value resulting from the subsidence-related damage. The permittee may provide compensation by the purchase, before mining, of a non-cancelable premium-prepaid insurance policy. The requirements of this paragraph apply only to subsidence-related damage caused by underground mining activities conducted after October 24, 1992.

(3) *Repair or compensation for damage to other structures.* The permittee must, to the extent required under applicable provisions of State law, either correct material damage resulting from subsidence caused to any structures or facilities not protected by paragraph (c)(2) of this section by repairing the damage or compensate the owner of the structures or facilities for the full amount of the decrease in value resulting from the subsidence. Repair of damage includes rehabilitation, restoration, or replacement of damaged structures or facilities. Compensation may be accomplished by the purchase before mining of a non-cancelable premium-prepaid insurance policy.

(4) *Rebuttable presumption of causation by subsidence.*—(i) *Rebuttable presumption of causation for damage within angle of draw.* If damage to any non-commercial building or occupied residential dwelling or structure related thereto occurs as a result of earth movement within an area determined by projecting a specified angle of draw from the outermost boundary of any underground mine workings to the surface of the land, a rebuttable presumption exists that the permittee caused the damage. The presumption will normally apply to a 30-degree angle of draw. A State regulatory authority may amend its program to apply the presumption to a different angle of draw if the regulatory authority shows in writing that the angle has a more reasonable basis than the 30-degree angle of draw, based on geotechnical analysis of the factors affecting potential surface impacts of underground coal mining operations in the State.

(ii) *Approval of site-specific angle of draw.* A permittee or permit applicant may request that the presumption apply to an angle of draw different from that

established in the regulatory program. The regulatory authority may approve application of the presumption to a site-specific angle of draw different than that contained in the State or Federal program based on a site-specific analysis submitted by an applicant. To establish a site-specific angle of draw, an applicant must demonstrate and the regulatory authority must determine in writing that the proposed angle of draw has a more reasonable basis than the standard set forth in the State or Federal program, based on a site-specific geotechnical analysis of the potential surface impacts of the mining operation.

(iii) *No presumption where access for pre-subsidence survey is denied.* If the permittee was denied access to the land or property for the purpose of conducting the pre-subsidence survey in accordance with § 784.20(a) of this chapter, no rebuttable presumption will exist.

(iv) *Rebuttal of presumption.* The presumption will be rebutted if, for example, the evidence establishes that: The damage predated the mining in question; the damage was proximately caused by some other factor or factors and was not proximately caused by subsidence; or the damage occurred outside the surface area within which subsidence was actually caused by the mining in question.

(v) *Information to be considered in determination of causation.* In any determination whether damage to protected structures was caused by subsidence from underground mining, all relevant and reasonably available information will be considered by the regulatory authority.

(5) *Adjustment of bond amount for subsidence damage.* When subsidence-related material damage to land, structures or facilities protected under paragraphs (c)(1) through (c)(3) of this section occurs, or when contamination, diminution, or interruption to a water supply protected under § 817.41 (j) occurs, the regulatory authority must require the permittee to obtain additional performance bond in the amount of the estimated cost of the repairs if the permittee will be repairing, or in the amount of the decrease in value if the permittee will be compensating the owner, or in the amount of the estimated cost to replace the protected water supply if the permittee will be replacing the water supply, until the repair, compensation, or replacement is completed. If repair, compensation, or replacement is completed within 90 days of the occurrence of damage, no additional bond is required. The regulatory authority may extend the 90-day time

frame, but not to exceed one year, if the permittee demonstrates and the regulatory authority finds in writing that subsidence is not complete, that not all probable subsidence-related material damage has occurred to lands or protected structures, or that not all reasonably anticipated changes have occurred affecting the protected water supply, and that therefore it would be unreasonable to complete within 90 days the repair of the subsidence-related material damage to lands or protected structures, or the replacement of protected water supply.

* * * * *

PART 843—FEDERAL ENFORCEMENT

11. The authority citation for Part 843 is revised to read as follows:

Authority: 30 U.S.C. 1201 *et seq.*, as amended:

12. Section 843.25 is added to read as follows:

§ 843.25 Energy Policy Act enforcement in States with approved State programs.

(a) *State-by-State determinations.* By July 31, 1995, OSM will determine for each State with an approved State regulatory program whether:

- (1) Direct Federal enforcement of the Energy Policy Act and implementing Federal regulations will occur under paragraph (b) of this section with respect to some or all surface coal mining operations in each State, or
- (2) The procedures of §§ 843.11 and 843.12(a)(2) will apply to State enforcement of the Energy Policy Act, or
- (3) A combination of direct Federal enforcement and State enforcement will occur.

(4) Before making this determination, OSM will consult with each affected State and provide an opportunity for public comment. OSM will publish its determination in the **Federal Register**.

(b) *Interim Federal enforcement.* (1) If OSM determines under paragraph (a) that direct Federal enforcement is necessary, §§ 817.41(j), 817.121(c)(2), and 817.121(c)(4) of this chapter will apply to each underground mining operation subject to that determination that is conducted in a State with an approved State regulatory program.

(2) If OSM determines under paragraph (a) of this section that direct Federal enforcement is necessary, the provisions of § 843.12(a)(2) will not apply to direct Federal enforcement actions under this paragraph (b). When, on the basis of any Federal inspection under this paragraph, an authorized representative determines that a violation of § 817.41(j) or § 817.121(c)(2) exists, the authorized representative

must issue a notice of violation or cessation order, as appropriate.

(3) This paragraph (b) will remain effective in a State with an approved State regulatory program until the State adopts, and OSM approves, under Part 732 of this chapter, provisions consistent with §§ 817.41(j) and 817.121(c)(2) of this chapter. After these provisions are approved, this paragraph will remain effective only for violations of §§ 817.41(j) and 817.121(c)(2) that are not regulated by the State regulatory authority.

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