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THE BONDING PROGRAM UNDER THE 1977 SURFACE MINING CONTROL AND RECLAMATION ACT: CHAOS IN THE COALFIELDS

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I. INTRODUCTION

The Surface Mining Control and Reclamation Act of 1977 ("SMCRA" or "the Act") represented the first federal legislative effort to regulate the environmental impact of the mining of coal.¹ The Act was enacted by Congress in order to "establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations."² At the core of the Act is a comprehensive set of environmental performance standards which are to be applied to all coal mining operations. Title V of the Act establishes a permitting program for controlling surface coal mining impacts, and imposes on all phases of mining operations certain standards for environmental performance.³

Administration of the Act was committed to the Office of Surface Mining Reclamation and Enforcement ("OSM"), an agency within the Department of Interior, and was to be implemented in two phases. The first phase, referred to as the "interim" or "initial" regulatory program, became effective six months

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² 30 U.S.C. § 1202(a) (1982). The scope of the term "surface coal mining operations" was intended to be comprehensive in coverage, controlling impacts of not only traditional surface mining operations such as strip, area, auger, and mountaintop removal mining, but also in situ coal removal, coal processing, and surface impacts incident to underground coal removal. H.R. REP. No. 218, 95th Cong., 1st Sess. 57-58, reprinted in 1977 U.S. CONG. & AD. NEWS 593, 595-96.

after enactment of SMCRA. During this first phase, OSM directly enforced certain of the environmental performance standards of Title V against those surface coal mining operations which at the time of the Act's passage were regulated by the states. While the interim regulatory program requirements were incorporated by federal law directly into permits issued under state law after the Act's passage, the existing permitting and bonding mechanisms of the states were left intact.

During the interim program, states had an opportunity to submit to the Secretary for approval a "state program" designed to implement and administer through state laws and regulations the full panoply of permitting, planning, inspection, enforcement, and environmental performance standards provided for in the "permanent program" of Title V in accordance with the Act's requirements. Failing this, the Act required the emplacement of a "federal program" for that state.

In addition to the substantive standards of performance which govern the mining and reclamation process from minesite preparation through final reclamation of the disturbed area, the permanent regulatory program requires each permitted operation to file with the regulatory authority a bond "conditional upon faithful performance of all the requirements" of the Act and the permit itself.4

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4 The full text of sections 509(a) and (b) of the Act, which establish the requirements for the performance bond, read as follows:

(a) Filing with regulatory Authority; scope; number and amount.

After a surface coal mining and reclamation permit application has been approved but before such a permit is issued, the applicant shall file with the regulatory authority, on a form prescribed and furnished by the regulatory authority, a bond for performance payable, as appropriate, to the United States or to the State, and conditional upon faithful performance of all the requirements of this Act and the permit. The bond shall cover that area of land within the permit area upon which the operator will initiate and conduct surface coal mining and reclamation operations within the initial term of the permit. As succeeding increments of surface coal mining and reclamation operations are to be initiated and conducted within the permit area, the permittee shall file with the regulatory authority an additional bond or bonds to cover such increments in accordance with this section. The amount of the bond required for each bonded area shall depend upon the reclamation requirements of the approved permit; shall reflect the probable difficulty of reclamation giving consideration to such factors as topography, geology of the site, hydrology, and revegetation potential, and shall be determined by the regulatory authority. The amount of the bond shall be sufficient to assure the completion of the reclamation plan if the work had to be performed by the regulatory authority in the event of forfeiture and in no case shall the bond for the entire area under one permit be less than $10,000.

(b) Liability period; execution.

Liability under the bond shall be for the duration of the surface coal mining and reclamation operation and for a period coincident with operator's responsibility for revegetation requirements in section 515. The bond shall be executed by the operator and a corporate surety licensed to do business in the State where such operation is located, except that the operator may elect to deposit cash, negotiable bonds of the United States Government or such State, or negotiable certificates of deposit of any bank organized or trans-
This "performance bond" must be posted to cover the area upon which mining operations are conducted. Liability under the performance bond encompasses both performance during the active mining operation itself and for a subsequent period concurrent with the responsibility of the operator for the reestablishment of vegetation on the disturbed area. The performance bond is conditioned on "faithful performance of all the requirements" of the Act and the operator's permit. The amount of the performance bond is set by the regulatory authority and must be sufficient to assure completion of the "reclamation plan" if the regulatory agency were required to perform the work in the event of a default or "bond forfeiture" by the permittee under the obligations of the Act.

The "reclamation plan" which must be submitted with the permit application, requires *inter alia* a detailed presentation of pre- and post-mining land uses, the planning, timing, and sequence of the proposed mining operation, and steps which will be taken to protect water resources. The reclamation plan is intended to be "a blueprint for action" demonstrating how the environmental standards of the Act will be met during and after mining.

Section 509 of the Act also provides for adjustments in the bonded levels by the regulatory authority to reflect increases or decreases in permitted acreage or reclamation costs.

Finally, section 509 provides discretion for the regulatory authority to allow a permit applicant to "self-bond" without a separate surety under certain circumstances. Under this section, the Secretary of Interior also has the authority to approve state or federal programs containing an "alternative system" in lieu of a bonding program which meets the goals and objectives of section 509.

The interpretation and implementation of the bonding requirements of section 509 of SMCRA, both on a national level and in the individual state programs,
has been one of the more chaotic areas of the Act. The purpose of this Article
is to discuss the major areas of current debate and transition surrounding the
bonding provisions of the Act from a legal and public policy perspective. Fol-
lowing a general discussion of performance bonding, this Article will consider
significant current issues in the bonding area relating both to the scope of bond
coverage (incremental and "phased" bonding) and bond forms and alternatives
(self-bonding and "bond pools").

II. LEGISLATIVE INTENT AND REGULATORY HISTORY OF THE PERFORMANCE
BOND UNDER SMCRA

The requirement of a performance bond for each operation permitted under
the 1977 Act was thought by Congress to be a pivotal component of a nationwide
program to control the impacts of mining activities. In describing the performance
bond provisions of the Act, the Senate Committee on Energy and Natural Re-
sources called bonding "one of the most important aspects of any program to
regulate surface mining and reclamation."\(^\text{11}\)

The performance bond was envisioned as the ultimate guarantee of the im-
plementation of environmental protection standards through a bonded liability
"sufficient in amount to assure completion of the reclamation plan if the work
had to be performed by the regulatory authority at no expense to the public" if
an operator defaulted on the mining and reclamation performance obligations
imposed by the Act and permit.\(^\text{12}\) In short, the objective of the performance bond
was that of "having a fund available to accomplish reclamation."\(^\text{13}\)

Since the initial promulgation of the permanent regulatory program regula-
tions by OSM in 1979, major components of the bonding program have been
subject to scrutiny, both from the courts and from the regulated industry, en-
vironmental and public-interest groups, and multi-interest committees. The initial
publication of the 1979 permanent program bonding rules\(^\text{14}\) brought a judicial
challenge to a number of the rules.\(^\text{15}\) As a result of an April 1979 petition for

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\(^{11}\) S. REP. No. 128, 95th Cong., 1st Sess. 78 (1977).

\(^{12}\) Id.

\(^{13}\) Id. During the deliberations of the House Committee On Interior and Insular Affairs, the
committee adopted an amendment to section 518(e) of H.R. 2 which granted the Secretary of Interior
discretionary authority to take any civil penalties imposed upon the permittee for violations of the
Act from the performance bond. H.R. REP. No. 218, supra note 2, at 68. The Senate Amendments
had no such provision, and the House Conferrees in the Committee of Conference on H.R. 2 and
S. 7 acceded to the Senate conferrees and removed the provision from the final bill, which became


\(^{15}\) In re Permanent Surface Mining Regulation Litigation, No. 79-144, at 41-45 (D.D.C. Feb.
26, 1980). The OSM Director suspended the rules requiring immediate cessation of operations when
the surety became insolvent or the surety license was revoked, and other rules relating to bonding
rulemaking, OSM further revised the bonding rules. The "regulatory reform" efforts of the first Reagan Administration brought yet another predictable round of regulatory changes followed by further legal challenges.

The responsibility for setting the amount of the performance bond under section 509 for an operation lies with the "regulatory authority." This is either the state agency managing a "state program" approved under section 503 of the Act or OSM under a federal program implemented for that state under section 504. As the cost of reclamation varies depending on site and mining method-specific variables, the amount of the bond likewise was intended to "depend upon the reclamation requirements of the approved permit [and to] reflect the probable difficulty of reclamation giving consideration to such factors as topography, geology of the site, hydrology, and revegetation potential."

Although the bond was to reflect the cost of reclamation to the Act's standards if such work was performed by a third person at no expense to the public, there are strong indications that the amount of bonds required in the eastern coal states understated the cost of compliance with the Act. Kentucky is one case in point. As with most of the eastern coal states, Kentucky had a permitting and bonding program for surface mining operations in place prior to the enactment of SMCRA and the adoption of a permanent state program. Bonding rates set prior to the institution of the "state program" in Kentucky under SMCRA have been readily acknowledged by state officials to have been inadequate to accomplish reclamation in most cases in which forfeiture has occurred.

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of hydrology impacts. The district court ruled on four issues on February 26, 1980, upholding the rules on bond forfeiture and bond amount adjustment. Other rules were remanded for inclusion of provisions relating to public participation in bond release and returning excess forfeiture amounts. For a summary of the development of the permanent program bonding rules and subsequent modifications, see 48 Fed. Reg. 32,932 (1983).

20 S. Rep. No. 128, supra note 11, at 78.
21 See GAO, DIFFICULTIES IN RECLAIMING MINED LANDS IN PENNSYLVANIA AND WEST VIRGINIA (Sept. 1986) [hereinafter cited as DIFFICULTIES].
22 Correspondence from Director, Division of Permits, Kentucky Department of Natural Resources and Environmental Protection (Sept. 2, 1982) (detailing the establishment of a multi-interest "Bonding Task Force" to study the problem of higher bond rates under permanent program and potential for establishment of a bond pool).

Data developed by the Kentucky regulatory authority reflected that, in 1982, the average bond per acre for all outstanding interim and pre-interim program permits was $928 per acre. The regulatory authority acknowledged that "[t]o date, the Department's record in reclaiming bond forfeiture areas has been weak because of inadequate bonds being assessed. Since August 1977, bond forfeitures have continued to occur with bond amounts continuing to be inadequate to complete reclamation." Id.
The problem of inadequate interim programs was not unique to Kentucky. A 1986 General Accounting Office ("GAO") report on surface mining bonding concluded that in Pennsylvania and West Virginia, interim program bonds were inadequate to cover site forfeitures. Specifically, Pennsylvania interim program bonds cover only about twelve percent of the cost of reclamation of interim forfeiture sites; in West Virginia, the bonds cover forty-six percent of reclamation cost.23

The reasons for the underassessment of bonds largely can be traced to the same forces which perpetuated the historic trend of ineffective and lax enforcement of environmental restrictions on mining activities in the eastern coal states prior to the enactment of SMCRA. According to Congress, "[f]or a number of predictable reasons—including insufficient funding and the tendency for State agencies to be protective of local industry—State enforcement has in the past, often fallen short of the vigor necessary to assure adequate protection to the environment."24 Congress recognized that interstate competition among sellers of coal produced in different states was undermining the ability of the several states to improve and maintain adequate regulatory programs for mining impacts.25 The pressure to minimize disincentives for coal production by industry among the coal states carried over into the setting of performance bond levels, which if properly assessed would often constitute the single largest financial outlay in the permitting process. In essence, it was a "race to the bottom" among the coal states in setting performance bond levels.

The same forces continue to be at play in the establishment of bond amounts under SMCRA permanent programs by the states. In states such as Kentucky, the bond amounts established under the permanent program, while greater than the interim bond amounts, do not begin to approach the true cost of reclamation by third parties in forfeiture cases, which is the standard demanded by the Act.26 General Accounting Office investigations reflect that bonds under the permanent program in the states of Pennsylvania and West Virginia are likewise inadequate to cover reclamation costs.27

23 See DIFFICULTIES, supra note 21.
24 H.R. REP. No. 218, supra note 2, at 129.
26 The average bond rate per acre in Kentucky approximates $3,400 per acre. A comparison of the assessed bond rate and the cost of stabilization and revegetation of abandoned mine lands provides a benchmark for determining the actual cost of reclamation, and reflects that the assessed bond rate is between one-third and one-half of the true cost of reclamation.
27 The use of AML reclamation costs may in fact understate the true cost of reclamation, for the AML standards of reclamation address stability in the main and do not require that the property be restored to the pre-mining land use capability or vegetation levels. If the AML standard of reclamation were set at the level for the performance bond (i.e., completion of the reclamation plan) the costs probably would increase beyond current expenditures, reflecting an even wider gap between assessed bond amounts and true reclamation cost.
27 Statement of Michael Gryszkowiec, Associate Director of U.S. General Accounting Office, before House Subcommittee on Environment, Energy and Natural Resources (June 26, 1986).
Compounding the current situation is the failure of OSM to adequately oversee the performance of the individual state regulatory agencies in the bond setting process. A December 1985 GAO report concluded that "OSM is not in a position to determine whether the bonds established under these state systems are adequate to reclaim mined lands." This GAO report, which reviewed OSM evaluations of the individual state programs, found that the oversight reports for 1984 did not address the adequacy of bond amounts in fourteen of the twenty-three states with approved state programs, and that of the remaining nine states, six states were reported as having inadequate bonds.

The dilemma for state regulatory agencies between historical, economic, and political pressures towards underassessment of bond rates on individual operations and the requirement that the bonds be set at levels sufficient to provide for restoration of mined areas has led a number of the coal states to seek alternatives to the posting of individual cash, collateralized, or surety performance bonds for mining activities which would lower the cost of individual compliance with section 509. This movement away from the section 509(b) performance bond approach to the development of "alternative systems" under section 509(c) has brought with it a host of new potential and new peril.

III. ALTERNATIVE SYSTEMS OF RECLAMATION ASSURANCE

A. The Bond Pool

A "bond pool" is an alternative mechanism providing a fund for reclamation which relies on a combination of membership fees or assessments on participants usually coupled with a per acre or per ton assessment on land included under a permit or coal produced by a pool member's mining operations. Among the various states which have so-called pools or reclamation "funds" are West Virginia, Indiana, Missouri, Virginia, and Kentucky.29

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29 For example, the Kentucky Bond Pool, which is a hybrid of other state models, combines a membership fee ranging from $1,000 to $2,500 depending on the applicant's past reclamation record and history of operations, and a per ton assessment of eight cents for surface mined coal and one cent for underground mined coal. This is coupled with individual performance bonds ranging from $500 to $2,000 per acre which guarantees "phase I" of reclamation, or rough backfilling and grading of the mined area. When the pooled assessment fund reaches $7 million dollars, further tonnage assessments are suspended until the fund decreases to $5 million dollars due to payments from the fund for member forfeitures.

The West Virginia program assesses one cent per ton on clean coal, with a cap of $2 million and a floor of $1 million dollars, coupled with a $1,000 per acre bond for each acre permitted. Indiana's fund is comprised of a $2,000 annual operator fee plus an additional annual permit fee of $1,000. Missouri has a graduated fee on coal mined, thirty cents per ton for the first 50,000 tons twenty cents for next 50,000 tons with fund cap of $4 million dollars, with $500 per acre individual bond. Membership in the West Virginia and Missouri reclamation funds is mandatory. Pennsylvania requires a $3,000 per acre bond supplemented with a $50 per acre permit fee for a bond supplement fund.
The performance bond, which is individually posted by a particular operator under sections 509(a) and (b), is required to be set at an amount necessary to complete the reclamation plan and achieve compliance with the Act, without regard for the degree of risk of reclamation performance failure and hence, of bond forfeiture posed by the individual operator. In contrast, reclamation funds or bond pools are to some degree actuarily-based, which is to say that the funding mechanism and levels are set to provide a fund less than the total liability guaranteed by the fund. The funding levels are based on the assumptions that: (1) all operators do not present the same degree of risk of forfeiture; and (2) the risk of forfeiture in the subject population can be quantified and assigned a numeric value for assessment upon individual participants in order to create a fund which will be sufficient at any time to address the acreage assumed to be at risk of forfeiture. Based in large part on historical data regarding operator forfeiture and projections of reclamation cost, the necessary funding levels are achieved through assessments on pool members.

Two issues dominate the question of alternative systems: whether and when such an alternative system is consistent with section 509 of the Act. The first question speaks to the legal requirements of section 509; the second, to the assumptions underlying the structure and funding mechanisms of the individual state funds.

The Act provides sparse guidance regarding "alternative" performance assurance systems. Any alternative system to the individual performance bond under section 509(a) must be found by the Secretary of Interior to comport with section 509(c) which demands that the alternative system "achieve the objectives and purposes of the bonding program pursuant to [section 509]."30 Those objectives and purposes are "having a fund available to accomplish reclamation."31 Beyond this, the Act and its legislative history give no guidance as to the nature of the alternative systems contemplated by the House Committee where the concept originated.

It may be readily inferred that, in order for an alternative system to be approved under section 509, it must provide sufficient funds to reclaim all forfeited sites at any point in time; otherwise it will not have a fund "available to accomplish reclamation" as required by the Act. Since the fund concept is grounded on the assumption that only a certain percentage of operators or operations will become forfeitures, assessments and fund levels reflect this assumed percentage of risk coupled with anticipated costs of reclamation rather than maintaining a fund with 100 percent of anticipated bond monies to reclaim all permitted acreage covered by the pool or fund. The twin actuarial assumptions of likelihood of

31 S. Rep. No. 128, supra note 11, at 78.
forfeiture and cost of reclamation must be sound or the reclamation fund may be grossly undercapitalized.

In some coal states such as Kentucky, the historic underassessment of individual bonds has carried over into undercapitalizing of reclamation funds. In deriving the Kentucky assessment figures, the actuarial study utilized historic rates of forfeiture as the statistical base, and the cost of reclamation was derived through the amount of assessed bond under the permanent program by the state. As has been previously stated, the assessment of bonds under the permanent program continues to be one-third to one-half of the true cost of reclamation to the Act’s standards, so that the assessment rate for the fund understates the cost of reclamation and hence the payout from the fund. Coupling this with the fact that historical data on forfeitures in Kentucky, as in other states, does not accurately portray the risk of forfeiture under the more complex requirements of the permanent regulatory programs, a window of vulnerability is created in that the payout of the fund may render the fund insolvent and leave the public unprotected in the event of further forfeitures. While the vulnerability in the Kentucky program is lessened because of the pre-screening of applicants to the pool and the initial “seeding” of the pool at a level of $500,000 by the Kentucky Legislature, the vulnerability is heightened in states with mandatory reclamation funds.\(^3\)

To date, OSM approval of various state alternative systems has failed to perform the degree of analysis necessary to assure that the conceptual underpinnings of the the state pools, and hence the financial status of the pools, is sound. The 1986 GAO report indicated that although OSM had approved both the West Virginia and Pennsylvania alternative bonding programs, neither system was evaluated by OSM to “assure that it was adequate to cover the costs of reclamation for all potential permanent program bond forfeiture sites as required by SMCRA.”\(^3\) In Pennsylvania, neither OSM nor the state conducted an actuarial study prior to adoption of the state reclamation fund to assure that the fund would be sufficient, according to the GAO investigation.\(^4\) In West Virginia, OSM conditionally approved the alternative bonding program, but required the state to have an actuarial study conducted. The study concluded that the alternative bonding program would be adequate for the first year, but made no conclusion beyond that time. OSM has not conducted an independent assessment of either the West Virginia or Pennsylvania programs in its annual oversight capacity, nor has either

\(^3\) In Missouri, for example, the amount of forfeitures in the initial years of the reclamation fund greatly exceeded funding levels. In response, Missouri has increased the individual acreage bond to $2,500, and increased the fund ceiling to $4 million. The future of the mandatory reclamation fund, and the question of how and to what standards the existing unfunded forfeitures will be reclaimed remains unanswered, according to OSM personnel.

\(^4\) **DIFFICULTIES**, supra note 21, at 49.

\(^{11}\) *Id.*
state been required to make an independent assessment of fund sufficiency since the programs were approved in 1982.\textsuperscript{35}

As the permanent programs enter the period during which the initial permits issued under primacy status are mined out, the bonding situation in the "pooled" states may become increasingly tenuous. The problem is exacerbated in states such as West Virginia and Pennsylvania, where the use of permanent program bond funds to reclaim interim program forfeiture sites as well as payment of bonding program administration costs from the reclamation funds further erode the sufficiency of these alternative bonding funds. Currently, OSM has no component of oversight to analyze the various state programs to assure that the initial judgments which underlay the setting of membership or assessment rates for these alternative systems are actuarially sound, or remain so, in light of state experience, or must be adjusted upward to meet the sufficiency requirements of section 509.

A concern related to the movement toward alternative systems in those states with voluntary systems is the impact on nonmembers who attempt to secure third party bonds for mining permits. In order to protect the integrity of the reclamation fund, some states with voluntary pool systems have established entrance requirements designed to "pre-screen" applicants for potential risk of forfeiture. While historical performance and length of business experience cannot guarantee future performance, these factors are believed to be indicators of future risk.\textsuperscript{36}

The impact on operators who do not meet the particular reclamation pool membership criteria may be to increase substantially the cost of reclamation bonding or to prohibit market entry altogether because of unavailability of surety bonds. As the bond pool seeks to absorb the best risks into the pool for stability and a broad membership base, it likewise removes from the private surety market the same low or lower-risk operators who had formerly participated in the surety bond market. This may result in a further restriction of availability of surety bonds or a cost increase in the private reclamation surety market for the ineligible operators.

\textsuperscript{35} Id.

\textsuperscript{36} The Kentucky bond pool, for example, establishes three rankings of membership: "A," which is limited to applicants who have held permits for five of seven preceding years in the same name and have an excellent compliance record; "B," for those who have held permits for the same period of time in the same name and has an "acceptable" compliance record; and "C" rating for those applicants with an acceptable compliance record who have operated for three of the past five years in the same applicant name. Membership fees and the individual phase I bond required under the Kentucky approach are set at different levels dependent on the applicant's rating. While the Kentucky bond pool legislation so differentiates, the amount of the difference is not great. Membership fees amounts range from $1,000 for "A" rated applicants, $2,000 for "B" rating, and $2,500 for "C" rating, and the phase I bond likewise ranges from $500 to $2,000 per acre. Considering the inconsequential range of fees and the cost of reclamation, the distinctions drawn do not really reflect any differentiation of risk among applicants meeting basic entrance criteria.
As congressional pressure increases on OSM to oversee the setting of bond levels among the various state programs, and as higher bond levels and other market forces further restrict the availability of individual surety bonds, it is probable that the "alternative system" approach to meeting the section 509 performance bond requirements may increase in popularity as an alternative to the politically unpopular process of assessing bond levels at the actual cost of reclamation. A consistent, thorough, and continuing analysis and oversight of these state reclamation funds and bond "pools" previously lacking in OSM will be critical in assuring that the public at large is not forced to bear the cost in failed reclamation, sedimentation, acid runoff, and loss of agricultural and forest land, of a new generation of orphan mined lands.

B. Self-Bonding

An area of continuing controversy in performance bonding is that of "self-bonding" or self-insurance of mining operations. Section 509(c) of the Act authorizes alternative systems to individual performance bonds required to be secured by cash, negotiable instruments, collateral, or surety bonds, and further authorizes "self" bonding by the applicant under certain conditions. Section 509(c), in pertinent part, provides that:

The regulatory authority may accept the bond of the applicant itself without separate surety when the applicant demonstrates to the satisfaction of the regulatory authority the existence of a suitable agent to receive service of process and a history of financial solvency and continuous operation sufficient for authorization to self-insure or bond such amount . . .. 37

The self-bonding provision was contained in the Senate Committee on Energy and Natural Resources Amendments to House Bill 2 (Senate Bill 7). 38 The House Committee Bill contained no such provisions, and the House managers acceded to the Senate provision in conference. In describing the self-bonding provisions, the entire legislative history of the provision stated that "[s]ubsection (c) recognizes that some applicants can satisfy the objectives of the bond requirement through self-insurance or bonding. 39 The objective of the bond, according to the Senate committee, was "having a fund available to accomplish reclamation. 40 The conference committee report underscores the allowance of self-bonding in a particular program as discretionary with the regulatory authority. 41

The history of self-bonding has shown a progressive relaxation of the standards for qualification by OSM and a continued and marked reluctance by many

38 S. Rep. No. 128, supra note 11, at 78.
39 Id.
40 Id.
states to allow self-bonding due to concern for unpaid forfeitures in the event of insolvency or bankruptcy by the self-bonded operator. As with the other federal regulations on bonding, the regulatory history of self-bonding has been stormy.

The 1979 regulations contained the most stringent standards for self-bonding since the enactment of SMCRA. As proposed, these regulations would have required the applicant to demonstrate compliance with the Act over a ten-year period, and to demonstrate financial solvency by showing that the applicant had a net worth of twice all bonded obligations.42 The 1979 rule, as finalized, decreased the net worth ratio from one-half to one-sixth, and added a requirement that a mortgage or security interest in property at least equal to the bonded liability be granted to the regulatory authority.43 A petition for rulemaking was filed shortly after the effective date of the 1979 rules which, among other proposals, sought to remove this requirement of security or "collateralizing" the self bond. The petition was granted and a proposed rule which would have deleted the net worth test, removed the collateral requirement, and retained only one eligibility standard—continuous operation for ten years—was so heavily criticized that the original rule was retained in the final rulemaking.44 OSM instead proposed to undertake a study of self-bonding.45 The study was later cancelled for budgetary reasons,46 and as part of the larger "regulatory reform" effort which proposed to place the emphasis and onus on the individual states to develop their own self-bonding programs.

The failure to revise the self-bonding rules in response to the 1979 petition for rulemaking led to litigation, subsequent settlement, and suspension of many of the self-bonding rules in December 1981. In light of criticism by states, industry, public interest groups, and sureties alike of the initial 1981 proposal to leave development of self-bonding requirements entirely to the states,47 OSM finalized rules relating to self-bonding in August 1983, which established requirements and provided more detailed guidance to the states than the 1981 proposal, but less detailed than the initial 1979 rules in establishing federal minimum standards.

Specifically, the 1983 proposal established four requirements: (1) continuous operation over a five year period; (2) financial solvency demonstrated by an "A" or higher bond rating, tangible net worth of $10 million plus certain financial ratios, or ownership of $20 million in fixed assets plus certain financial ratios; (3) submission of financial information; and (4) execution of indemnity agreements by responsible officers or parties.48 The requirement of a collateral security agree-

48 Id. at 36,419.
ment was removed and the concept of "self" bonding was expanded to allow a parent corporation meeting the self-bonding requirements and having a controlling interest in a subsidiary which applies for a permit, to guarantee the self-bond of the subsidiary.49 A recently proposed rule would further expand third party guarantee of a "self" bond by allowing nonparent corporate guarantors of an applicant's self-bond without a separate surety or security agreement.50

While the elimination of the requirement to pledge a secured interest or mortgage real or personal property as an adjunct to the self-bond was not challenged, the 1983 modification is questionable as a matter of law and a risky proposition from the public perspective. The 1979 rulemaking, which imposed the requirement that the operator grant the regulatory authority a mortgage or security interest valued at an amount at least equal to the bonded liability, was explained by OSM in this fashion:

This requirement was requested by a commenter concerned that the public might have to bear the expense of reclamation in circumstances similar to the Blue Coal case . . . . Each of these comments were considered valid since otherwise the regulatory authority would be left responsible if the permittee goes bankrupt, dissolves, or leaves the country. Also, as shown by Pennsylvania's recent Blue Coal experience, even large closely held corporations can be robbed of assets. The financial vitality initially relied upon by the regulatory authority can be quickly dissipated. The regulatory authority must forfeit and force bankruptcy with the regulatory authority then becoming responsible for massive clean-up operations with little expectation that the full value of the bond will be recovered.51

The Blue Coal case, which OSM used as an example of the necessity for requiring a secured interest, involved a large, closely held multimillion dollar coal producer in Pennsylvania.52 The regulatory authority attempted unsuccessfully to prevent the company from removing a dragline from a mine site until reclamation was completed, and as a result of a bankruptcy proceeding, the company successfully avoided reclamation responsibility. Blue Coal, OSM noted, "would have been a prime candidate for approval as a self-bonded operator in the early 1970's."53

The concern of OSM for the practical implications of a self-bonded company's insolvency on the ability to secure reclamation was coupled with the analysis by OSM of the legal requirements of section 509(c). This led OSM to conclude that a security interest must accompany a self-bond:

The Office [OSM] has interpreted the legislative history to require that funds

49 Id.
needed by the regulatory authority to complete reclamation be available and as secure under a self-bond as they would be under a surety or collateral bond. This can only be accomplished by giving the regulatory authority a security interest in property of sufficient value . . . .54

Unquestionably, the deletion of the 1979 requirement of a pledge of a security interest increases the vulnerability of the regulatory authority and the public to unreclaimed forfeited sites in the event of operator insolvency. In responding to criticism of the 1982 proposal to delete the secured interest requirement, OSM stated that:

The purpose of establishing a self-bond program is to recognize that there are companies that are financially sound enough that the probability of bankruptcy is small. A self-bond is allowed both because there are enough assets to allow reclamation in case of bankruptcy, and because there is little probability of bankruptcy.55

This response sidesteps the critical question as to whether such a self-bond provides a degree of assurance that a fund which is equivalent to the assurance provided by a collateral, surety, or cash bond will be available to accomplish reclamation in the worst case scenario. If it does not, it fails to meet the stated objective of the bond and does not comply with section 509(c). It is irrelevant that the “probability of bankruptcy” is low for Congress intended that in all cases the public would not be forced to bear the costs of operator reclamation failures.56

The OSM has acknowledged that the 1983 rule does not provide such assurance. It has admitted the tenuous position of a regulatory authority under the 1983 rule in a bankruptcy setting:

In the event of bankruptcy, the regulatory authority would probably be in the position of unsecured creditor. Typically, the regulatory authority would have to go through bankruptcy proceedings to secure payment on the indemnity agreement. Bankruptcy proceedings are often lengthy and involved, and the regulatory authority could have to settle on less than 100% payment on the indemnity agreement. The regulatory authority may be left with insufficient funds to complete the reclamation plan and may have to obtain funds elsewhere to do so.57

The Secretary thus acknowledged that the unsecured self-bond would not function adequately in the very situation for which the bond was intended to provide assurance of proper performance. OSM’s response understates the mag-

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54 Id. at 15,115 (emphasis added).
56 S. Rep. No. 128, supra note 11, at 78.
amplitude of the vulnerability, since there is no "elsewhere" to turn for reclamation funds, as Title IV Abandoned Mine Land monies by definition are unavailable for reclamation of Title V lands. The fiscal burden of the unreclaimed land will fall directly on the public in the resource extraction areas and in a broader sense, on society-at-large.

Compounding this vulnerability is the failure of the 1983 rules to mandate periodic monitoring of the financial viability of the self-bonded operator. While recognizing the importance of examining financial statements and other information so that replacement bonds could be required when necessary to avoid or lessen vulnerability, the Secretary opted to make such periodic reporting and monitoring elective with the individual states. Such monitoring is not an effective substitute for a secured interest, since the ability of a self-bonded operator to secure alternative bonds is doubtful once the operator begins to have operational performance problems or financial insolvency occurs.

The second area in which the concept of self-bonding has been broadened beyond what the Act requires and logic dictates is in nonapplicant guarantees. In 1983, the regulatory changes authorized a parent corporation guarantor to guarantee the self-bond of a subsidiary, if the parent corporation qualified under the self-bonding rules.\textsuperscript{58} In such a circumstance, the applicant itself need not qualify if the self-bond is guaranteed by a qualifying parent corporation guarantor, through the execution of an unsecured indemnity agreement.

The vulnerability of the unsecured nature of such a guarantee previously has been discussed, and applies with equal weight to the parent-subsidiary self-bond. Commenters to the 1983 rule argued for further expansion of the nonapplicant self-bond guarantee, in that noncorporate third party guarantors and nonparent third parties such as utilities should be allowed to guarantee permitees.

The Secretary rejected further expansion of the concept of "self-bonding" to nonparent or noncorporate guarantors, on the basis that:

OSM does not agree that a third party guarantee will give sufficient assurance of a strong, direct interest in the successful mining and reclamation operations of the guaranteed party. Only a parent corporation that actually owns or controls the applicant has the necessary influence to affect management decisions of the operator and is able to supply quickly needed capital, labor or expertise in case of problems. For this reason the requirement that a guarantor be a parent corporation has been retained. Other forms of bonds by third parties must meet the surety requirements for surety bonds.\textsuperscript{59}

Despite the adamance of OSM in 1983 that only a parent corporation which could exercise control over the subsidiary should be permitted as a third party

\begin{itemize}
\item[58] 30 C.F.R. § 800.23(c)(1986).
\item[59] 48 Fed. Reg., \textit{supra} note 47, at 36,425.
\end{itemize}
guarantor, in 1986 it proposed to allow nonparent corporate guarantors of applicant self-bonds. The OSM explained this abrupt about-face by stating that "information presented during the public comment period" on a 1985 petition for rulemaking by the National Coal Association/American Mining Congress Joint Committee on Surface Mining Regulations led OSM to conclude that allowance of the nonparent guarantor "would not increase the risk to a regulatory authority." OSM explained the rationale for this conclusion in this fashion:

Instances have been presented of mine mouth power plants, dependent upon the coal from the adjacent mine, that would be willing to guarantee the self-bond for the mine operator. Although a corporation such as a utility company is not a parent to the mine operator, in such an instance, it does have a significant vested interest in the proper operation of the mine.

Upon reflection, the departure of OSM from the 1983 rulemaking, and further attenuation of the concept of self-bonding runs afoul of both the Act and prudent regulatory practice.

A strong case can be made that it is illegal to allow any third party unsecured indemnity agreement to satisfy the self-bonding requirements of section 509(c). Section 509(c) plainly requires that the regulatory authority "may accept the bond of the applicant itself without separate surety when the applicant demonstrates" a history of operation and financial solvency sufficient for authorization to "self-insure or bond" the bonded liability. The legislative history underscores that section 509(c) was adopted in recognition that "some applicants can satisfy the objective of the bond requirements through self-insurance or bonding." The conference committee report noted that the scope of section 509(c) was limited to allowing "applicants to bond themselves."

The allowance of any nonapplicant guarantor of an applicant's "self" bond is thus beyond the plain language and legislative intent of the Act. The allowance of a nonparent guarantor further expands a legally tenuous regulation beyond reason.

The logic of the proposed rule, which is grounded on the belief that certain nonparent corporate guarantors have sufficient "vested interest in the proper operation of the mine," is faulty. Nothing in the relationship of a utility and the producing mine upon which the utility is dependent provides the assurances felt by OSM in 1983 to be critical in a nonapplicant guarantor situation, that is, the

\[52\] Id.
\[53\] 30 U.S.C. § 1259(c) (emphasis added).
\[54\] S. Rep. No. 128, supra note 11, at 78 (emphasis added).
ownership or control necessary to exert influence so as to keep the operator in compliance with reclamation responsibilities and the ability to assist the operator by providing the financial resources, capital, labor, and experience deemed necessary by Congress to assure reclamation.

It is questionable in the first instance whether a utility could assume such liabilities, or provide financial resources, capital, or labor to the bonded operator in a situation in which it lacked any control or ownership interest, without running afoul of various obligations to state utility regulatory commissions, utility rate-payers, or shareholders. Furthermore, the supposed “vested interest” in the proper performance of the mine is limited to the productive capability of the mine, and does not extend to nonproduction related reclamation responsibilities of the operator. This is particularly the case when the productive capacity of the mine has been exhausted and the final costly reclamation requirements, such as final backfilling and grading, mine pit closure, and revegetation remain after the utility has lost any interest in a mine no longer producing needed coal resources.

It is axiomatic that all forms of reclamation bonding carry a certain degree of risk of nonperformance, and that some carry a greater risk than others. Surety bonds carry a certain risk of surety failure, as do banks providing certificates of deposit for bonds. The risk increases substantially, however, as one moves away from surety, collateralized, or cash bonds into self-bonding by an applicant. In a self-bonding situation, there is no reinsurance fund to pay surety default, nor federal insurance of bank notes. The regulatory authority, and hence the public, is in the position of an unsecured private creditor seeking payment of a debt. Allowing a nonparent corporate guarantor to stand liable in lieu of the applicant for a self-bond decreases the responsibility of the applicant to comply with reclamation responsibilities by removing any disincentive for bond forfeiture that would flow from having the applicant’s own collateral, secured pledge, or cash at stake. It additionally attenuates further the responsibility for assuring reclamation. The risk of nonperformance increases substantially, and with that risk comes an increased cost to the public from environmental impacts and loss of land use from unreclaimed sites. The current state of self-bonding is a far cry from the assurances of reclamation at no cost to the public which Congress envisioned that performance bonding under section 509 of the Act would provide.

IV. SCOPE OF BONDING

A. Incremental Bonding

From a practical standpoint one of the most important issues in the bonding of surface coal mines concerns the practice of “incremental bonding.” Simply put, incremental bonding is the bonding of only a portion of the total area to be mined during the term of the permit for a particular coal mining operation.
From the perspective of persons affected by the mining activity, allowing "incremental" bonds is a major problem. From the operator's perspective, however, incremental bonding is perhaps the single most effective mechanism through which the operator (or permittee) can lower the amount of the bond he must post to conduct a lawful coal mine operation in the United States. Under the incremental bonding system, as noted, a bond can be obtained for any area smaller than that covered by the area to be mined during the permit term. Thus, for a permit term of five years, there could be five, ten, or even twenty bonds. Of course, the operator has a significant economic incentive to bond as small an area or for as short a length of time as possible, thus increasing the number of bonds for a given site and decreasing the amount of resources committed to the bond at any one time. The smaller the bonded area, and therefore the amount of the bond, the greater the chance the bond will be inadequate if performance failure occurs.

Given the critical importance of incremental bonding to the affected interest groups, it is perhaps not suprising that industry and environmentalists have waged a seven year battle over whether the practice should be allowed, and if allowed, under what conditions. While the major concerns of the interest groups are practical, the struggle has been over whether Congress intended to allow such a practice.

The controversy turns on section 509 of the Act which requires all persons who operate surface coal mining and reclamation operations to file a performance bond with the regulatory authority. According to section 509(a) of the Act:

The bond shall cover that area of land within the permit area upon which the operator will initiate and conduct surface coal mining and reclamation operations within the initial term of the permit. As succeeding increments of surface coal mining and reclamation operations are to be initiated and conducted within the permit area, the permittee shall file with the regulatory authority an additional bond or bonds to cover such increments . . . .

Section 509(a) further states that "[a]s succeeding increments of the coal mining operation are initiated, the permittee must file" additional bond or bonds to cover such increments. The environmental groups contend that in section 509(a) Congress intended that the initial bond must cover the entire area of land upon which mining will occur during the initial permit term, and that section 509(a)

\[66\] Under the Watt regulations, the only restriction on the number of increment bonds an operator could have was the vague requirement that "[i]ndependent increments shall be of sufficient size and configuration to provide for efficient reclamation operations should reclamation by the regulatory authority become necessary . . . ." 30 C.F.R. § 800.11(b)(4) (1986).
\[67\] 30 U.S.C. § 1259(a) (emphasis added).
\[68\] Id.
\[69\] S. Rep. No. 128, supra note 11, at 78 (emphasis added).
requires the coverage of the bond to be coterminous with the area of land to be mined during the permit term. As mining increments are initiated beyond the area to be mined during the initial permit term, new bonds must be posted.\textsuperscript{70}

The industry and the Secretary advance several major arguments to support their position that a bond may be issued for less than the area to be mined during the permit term. The Secretary contends that the use of the word "within" in the second sentence of section 509(a) preceding the phrase "the initial term of the permit" authorizes the bond to guarantee less than the entire permit term.\textsuperscript{71}

The Secretary and the industry also argue that the congressional use of the plural term "bonds" in section 509(a) undercuts the environmentalist's argument that a bond must cover at least the area to be mined during a permit term. According to the Secretary and the industry intervenors' interpretation, the reference by Congress to more than one bond in section 509 justifies bonds that are smaller than the area to be mined during the initial permit term.\textsuperscript{72} The environmentalists counter that such an interpretation reads out of the Act the requirement in section 509(a) that the bond shall "cover that area of land within

\textsuperscript{70} The environmentalist's position is that Congress intended the statutory phrase concerning the area of land disturbed "within the initial term of a permit" to mean the area of land disturbed during the permit term. The Senate Report states that "the bond must cover the entire area to be mined during the initial term of the permit." \textit{Id.} at 78 (emphasis added).

The environmentalists argue that congressional use of the terms "bonds" rather than "bond" in the third sentence of section 509(a) is completely consistent with their position and in no way supports the concept of incremental bonding. While Congress intended that there be no bond for less than the permit term, the Act and the regulations allow a combination of different bonds (surety, collateral, and self-bonding) to be used to meet the bonding obligation. In all cases, however, the "bond or bonds" must cover the entire permit term.

Also, in section 509(a) Congress stated that "as additional increments" of the mining operation are initiated, "additional bond or bonds to cover the increments" are necessary. Thus, Congress used the plural for "increment" when it used the plural for "bond".

\textsuperscript{71} The environmentalists contend that the preposition "within" as used in conjunction with the phrase "permit term" was intended by Congress to mean "during" the permit term, i.e., it is a spatial reference to the permit term rather than a geographical reference. Congress' intent on this point is made clear by the 1977 Senate Report, which explains the requirements of section 509(a) as follows: "The bond must cover the entire area to be mined during the initial term of the permit." S. \textit{Rep.} No. 128, \textit{supra} note 11, at 78 (emphasis added).

\textsuperscript{72} To further support his position, the Secretary has relied on legislative history which states in relevant part that "[i]f the bond is for only part of the permit area, it must be adjusted and increased as new portions of the permit area are disturbed or affected." Secretary's Responsive Brief at 114, \textit{In re} Permanent Surface Mining Regulation Litigation II (Round II) filed Mar. 5, 1984 (citing H.R. \textit{Rep.} No. 1445, 94th Cong., 2d Sess., at 114 (1976)). This statement offers no support for the Secretary's position, but suggests that the Secretary does not fully understand the impact of his own rules. The environmentalists concede that a bond may encompass only a portion of a permit area. The key area at issue is the area covered by the term of the permit. A permit can be issued for no more than five years. 30 U.S.C. 1256(b) (1982). Thus, the bonded area must encompass the area to be mined during the permit term even though the actual permit area may encompass a larger area to be mined over several permit terms.
the permit area upon which the operator will initiate and conduct surface coal mining and reclamation operation within the initial term of the permit." Stated another way, when Congress speaks in section 509(a) of "additional bonds" to "cover such increments," it meant additional bonds required in order to mine the original permit area during future permit terms.73

Finally, the Secretary and the industry have argued that section 509(c) of the Act provides independent authority for allowing incremental bonding for areas smaller than the permit term.74 The environmental groups contend that section 509(c) does not authorize the Secretary to promulgate alternative bonding regulations which would violate the bonding standards set forth in section 509(a). Rather, section 509(c) is intended to allow the approval of alternatives to bonding, such as an insurance system, which are proposed by the states, provided that such alternatives are as effective in assuring the performance of the operator as the bond required by the Act and the implementing regulations.75

73 The Secretary and the industry’s argument reflects a misunderstanding of the “permit area” to be mined during the permit term. The “permit term” is the total geographic area on which a mine operator is authorized to mine pursuant to his reclamation plan. It may be coterminous with the area to be mined during the permit term but often, an operator will desire to obtain a permit for a much larger area than the area he can mine during the maximum five year permit term. That is why the Act specifically provides for permit renewals at section 506(d). 30 U.S.C. § 1256(d)(1982). A permit renewal can be obtained upon the expiration of the permit term for any area within the boundaries of the permit area. Thus, an operator might need two, three, or even four permit terms to mine one permit area.

74 Section 509(c) states, in pertinent part, that “[I]n lieu of the establishment of a bonding program, as set forth in this section, the Secretary may approve as part of a State or Federal program an alternative system that will achieve the objectives and purposes of the bonding program pursuant to this section.” 30 U.S.C. § 1259(c).

75 The legislative history is as clear as the statutory language that in section 509(c) Congress contemplated approval of an alternative to bonding proposed by a state pursuant to section 503. It did not intend to allow the Secretary to promulgate bonding regulations which conflict with the bonding requirements in the Act. Thus, the House Report accompanying H.R. 13950, which marked the first appearance of the provision in 1976, stated that:

H.R. 13950 contains other important modifications designed to ease the impact of the new regulatory scheme on the operator. Included is a new provision to allow the state to implement an alternative system to bonding procedures required by the Act . . . .

This modification would allow the State to implement an alternative system to bonding (e.g., an insurance system) provided that it contains provisions to assure that the objectives and purposes of the bonding system are met.


The 1977 House Bill, H.R. 7, retained the provision, and the 1977 House Report noted with reference to section 509 of the Act that

This section prescribes the requirements for obtaining a performance bond covering the area to be mined within the term of the permit. In addition to setting forth the bond requirements, the section provides that the Secretary may approve an alternative system to bonding as part of a State program.

H.R. Ref. No. 218, supra note 2, at 172 (emphasis added).
While the legal controversy turns on a narrow issue of statutory construction, the practical consequences are immense. Incremental bonding is currently allowed in a number of major coal states such as Kentucky. If the environmentalists prevail, these systems will be scrapped, and bond levels could increase by several orders of magnitude. The issue will be decided as part of the massive litigation over the permanent regulatory program now pending in the United States Court of Appeals for the District of Columbia.

B. Phased Bonds

While "incremental" bonding is the bonding of an area of the minesite smaller than the area to be mined during the permit term, "phased" bonding is the bonding of each separate phase of the reclamation process (i.e., rough backfilling and grading, initial revegetation, and final reclamation). From the environmental perspective, the problem created by "phased bonds" is perhaps best explained by example. Assume that an operator files three bonds, one for each phase of reclamation on a given area, as the new rules allow. Following backfilling and grading, the phase I bond is released. Subsequently, following a storm, the backfilled area begins to slide, potentially causing considerable damage. Under the new rules, the remaining phase II and phase III bonds cannot be used to address the backfill problems that have developed because the remaining bonds are "posted and approved to guarantee specific phases of reclamation." Thus, even though the final phase III bond cannot be released until reclamation is fully completed, phase II money cannot be used, and apparently, even the phase III bond money may not be used to correct the problem that developed with the backfill because the liability under a phased bond is only for that phase.

The environmentalists have argued that in section 509(b), Congress specifically required that all bonds be posted for the duration of the "surface coal mining and reclamation operation" and the "entire area" of the permit term. Therefore, all bonds must assure compliance with all aspects of reclamation. Phased bonds do not meet this requirement. On the other hand, the Secretary and industry argue that section 519 authorizes phased bonds in addition to phased release of a bond; and section 509(c) authorizes the phased bond regulations.

Section 519 of the Act provides for a phased release of bonded liability as certain actions are accomplished. Thus, under section 519(c), sixty percent of the bond may be released when backfilling, regrading, and drainage control has been accomplished, and an amount to be determined by the regulatory authority may be released when vegetation is reestablished.

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76 30 C.F.R. § 800.13(a)(2).
77 See Id.
78 S. Rep. No. 128, supra note 11, at 78.
The industry and the Secretary do not distinguish between bond release and bond liability. However, the environmentalists contend that it does not logically follow from section 519 that if release of portions of phases of the bond is permissible, fragmenting of bond liability into discrete "phases" is thereby authorized by the Act. The critical difference is that in a failed reclamation situation, the "phased" bond posted for phase II will not be available to cover the additional cost associated with the phase I failure. This could occur, for example, when a backfill fails after release of the sixty percent of bond for backfilling and regrading. By fragmenting the bond into phases and then limiting bond liability to each phase of mining activity, the Watt rule prevented the remaining bond that otherwise would have been available to restore the backfill failure from being used to rehabilitate the site.

In the alternative, the Secretary and industry have argued that section 509(c) supports the concept of "phased" bonding. As discussed earlier as to incremental bonding, section 509(c) provides no grant of general authority to revise national regulations to provide for bonds which are inconsistent with the Act's specific bonding standards. Section 509(c), by its express terms, is limited to alternative systems of assuring performance, such as an insurance system, submitted by a state in lieu of establishing a state program for bonding under section 509. Section 509(c) does not authorize regulations that are national in scope, nor does it allow circumvention of the requirements set forth in section 509(b) or the process for gradual release of bond liability provided for under section 519.

This issue, as with the incremental bonding controversy, will be decided by the United States Court of Appeals as part of the litigation over the permanent regulatory program.

V. Conclusion

The many unsettled issues concerning the bonding requirements of section 509, including those of bond adequacy, scope, and duration of liability, will likely continue to be of major concern in congressional committee rooms and industry board rooms alike. Actual forfeiture data is now becoming available for surface coal mining operations permitted under approved "state programs," reflecting that the bond levels set by state regulatory authorities may be grossly inadequate to provide for completion of reclamation plans at forfeited minesites. The apparent failure of the regulatory agencies in key coal states such as Kentucky\textsuperscript{79} to

\textsuperscript{79} An OSM survey of four of the first five permanent program bond forfeitures in Kentucky indicated that "there first forfeited surface and underground mines will not be reclaimed to permanent program standards and may reflect serious programatic problems... These cases... indicated problems beyond inadequate bonds." Letter from Director, Office of Surface Mining, Kentucky Field Office to Secretary, Natural Resource & Envtl. Protection Cabinet, at 1 (Jan. 21, 1987) (hereinafter
set adequate bond levels no doubt will increase pressure to raise bond amounts under state programs, which in turn will increase the momentum toward adoption and expansion of "alternative bonding systems" by the states. It remains an open question whether OSM will develop procedures to adequately oversee these "alternative bonding systems" to assure that they satisfy the intent of section 509. The uncertain future of incremental bonding further clouds the bonding issue. The legality of incremental bonding will be decided as part of the larger challenge to the Reagan Administration "regulatory reform" efforts of 1981 to 1983, which resulted in wholesale revisions to the surface mining regulations, and subsequent reversal of many of these changes by the courts. It is ironic to note that the concept of incremental bonding as first developed by OSM in 1979 was not challenged by the public, and that it was the weakening of the public protection contained in the 1979 incremental bonding rules by the Reagan "reform" efforts in 1983 that triggered judicial challenge to and repudiation of the concept of incremental bonding itself. The most enduring legacy of the Reagan-Watt era in surface mining regulation may be the uncertainty of the business environment in the mining industry on the bonding question and in other regulatory areas caused by this predictable cycle of excessive regulatory revisions and subsequent judicial challenge. The other legacy of the confrontational politics of the Reagan-Watt era is a polarization of industry and environmental interest groups which makes achievement of a much-needed consensus on bonding all the more difficult.

The survey, conducted by OSM's Eastern Field Operation ("EFO") Office, compared the state-set bonds against the OSM bond calculations and determined that the bonds on the four operations were deficient by factors ranging from the low of 172% to a high of 317%. Both the state and OSM calculations assume prompt inspection and enforcement activity. In the cases reviewed, EFO determined that inadequate enforcement activity would make even the OSM bond level inadequate in two of the four cases, due to major slides, spoil replacement on the outslope, and the existence of disturbed coal removal areas far in excess of that permitted by law.

The letter identified this inadequate enforcement as a significant problem compounding the inadequacy of the state bonds. "In all four cases," the letter continued, "either all violations were not addressed, or were issued untimely . . . . As a result, there permits will not be reclaimed to permanent program standards . . . ." Letter, supra at 1.