Attachment 1

Office of Surface Mining Reclamation and Enforcement

Alternative Bonding Systems:

An Analytical Approach and Identified Factors to Consider for Evaluating Alternative Bonding Systems

November 1990

An Analytical Approach to Evaluation of Bond Pools as Alternative Bonding Systems

BACKGROUND AND OBJECTIVE

The Office of Surface Mining Reclamation and Enforcement (OSM) initiated this analysis to develop consistent considerations for evaluating how an alternative bonding system (ABS), commonly called a bond pool, would meet existing regulatory requirements. The task was designated as a Secretarial MBO and was accomplished through the OSM ad hoc bonding committee.

State Regulatory Authorities (RA) have expressed concerns about whether OSM Field Office Directors are consistent in their review of State ABS's. One major thrust of this MBO effort is to develop evaluation considerations that will help assure solvency of ABS's.

Six states currently use ABS's. By regulation, ABS's are required to provide sufficient funds to reclaim forfeited sites in a timely manner, and to maintain an incentive for permittees to complete reclamation.

The Director should encourage and be supportive of the use of ABS's that meet the requirements of the Act and regulations as a part of a state's bonding system. While OSM is concerned about whether ABS's are meeting existing requirements of 30 CFR 800.11(e), and whether they are complying with prudent accounting principles, the basic concept of an ABS is sound and may be a desirable and less expensive option for use as a supplement to a conventional bonding system.

To accomplish the MBO, the ad hoc committee examined and analyzed how ABS's work and what ways they use to continue to meet the existing requirements. In addition, the ad hoc committee examined whether existing or proposed ABS's provide sufficient funds to cover accountable liabilities. The ad hoc committee identified factors which are recommended for use in analyzing and understanding the mechanisms for ABS's to comply with statutory and regulatory requirements; and to assist in the consistent review of proposed state program amendments. If properly designed, ABS's should be well-managed and be based on sound accounting and actuarial principles.

This document identifies factors to consider when analyzing the sufficiency of an ABS to operate as a solvent and legally sufficient system under existing regulations. The factors,

presented below, are not all inclusive. All of the factors discussed for consideration should help OSM determine the ABS' sufficiency in meeting and continuing to meet the requirements of 30 CFR 800.11(e).

Basically the ABS must be solvent at all times to meet its liabilities promptly and to provide a substantial incentive for participants in the ABS to reclaim the land and not forfeit. Solvency is a dynamic concept and requirement; no preset recipe exists to assure the required "solvency." However, the solvency requirement exists and the ABS may demonstrate its solvency in any number of prudent and generally acceptable ways. Similarly, a "substantial economic incentive" for participating permittees may be demonstrated in any number of ways by the ABS. The document is comprised of the following components: 1) Regulatory and Legal considerations; 2) Financial and Technical considerations; 3) Administrative and Procedural considerations and 4) Conclusions.

I. REGULATORY AND LEGAL

1. Regulatory Considerations

Under established law and regulations, an ABS established pursuant to section 509(c) of the Act should be organized, capitalized, and managed in accordance with prudent and generally accepted accounting and actuarial principles. The ABS should adopt such legal, financial, managerial, actuarial and investment practices as may be necessary and appropriate to ensure the continuing ability of the ABS to satisfy its obligations promptly. These obligations include the obligation to either provide the funds or to reclaim, as the case may be. If the State regulatory authority (RA) manages, administers, or accounts for the ABS, it should adopt appropriate internal controls and safeguards to ensure that the authority to decide bond amounts, or take enforcement action, and to initiate and pursue forfeiture matters is exercised independently of the authority to manage, administer, and account for the ABS.

a. Statutory requirements for ABS's

Section 509(c) of SMCRA allows for approval of alternative bonding systems that achieve the objectives and purposes of Section 509. In other words, only ABS's that achieve the objectives and purposes of Section 509 are acceptable under the Act. A summary of what Section 509 requires follows:

- A permit applicant must file a bond with the regulatory authority using the RA's bond form prior to permit issuance.

- The bond must be conditioned on performance of all requirements of the Act and the permit.

- The bond must cover the entire permit or the initial area to be mined and all subsequent increments.

- The amount of bond is based on the costs of the reclamation requirements of the permit and must be sufficient to cover the work if done by the RA upon the permittee's forfeiture.

- The bond must be available to the RA and in effect through the end of the extended responsibility period for revegetation.

- The amount of bond required and the terms of each acceptance of the bond shall be adjusted by the RA as affected acreage changes or costs of reclamation change.

b. Regulatory requirements for ABS's

Section 800.11(e) (1) and (2) of 30 CFR require that ABS's comply with the following:

- Assure that the RA has available <u>sufficient</u> money to complete the reclamation plan for any areas which may be in default <u>at any time</u>, and provide a <u>substantial</u> economic incentive for the permittee to perform the reclamation (emphasis added).

2. Legal Requirements

The State regulatory authority (RA) should be able to demonstrate its authority to implement and administer an ABS as Section 509 and 30 CFR 800.11(e) require. In administering an ABS, the RA is subject to legal restrictions, including those in its state constitution. Legal authority should grant the RA the ability to accept and use the capital to fund the ABS and to administer the system. An ABS should set forth the rights and duties of the ABS and its participating permittees. A written document or narrative statement of this authority and the rights and duties of participating permittees should exist. We recommend the following considerations:

a. A narrative statement such as a charter or other document that provides the RA's authority, and includes the operating rules of the ABS:

- A description of the ABS' legal form and how it operates.

- Reference to the state laws that grant the RA the authority to implement and manage the ABS.

- Provisions that set forth the operating rules of the ABS.

- A provision that if the ABS is responsible for or undertakes to reclaim forfeited sites it must do so according to the approved permit and regulatory requirements of the approved state program in a ~~prompt and~~ timely manner.

- Reference to the legislative authority that allows the RA to adjust rates as needed to cover accountable liabilities.

- Reference to the legislative/constitutional authority that allows the state to tax if a part of the revenue or income generating system.

- If it's anticipated that the ABS will rely on retroactive assessments to maintain sufficient income levels, then a reference to the authority and operating rules for retroactive assessments is needed.

- A provision that the ABS would be continuously liable for generating sufficient funds to reclaim ABS participants' sites at any time including the period following termination of the ABS either by the RA or under 30 CFR 733.

b. An indemnity agreement executed by the ABS participating permittee and the RA for each bonded site that explains the terms and conditions to which each permittee is subject, including the following recommended items:

- A statement or inclusion of the legal land description and permit number of the permitted area and number of acres covered.

- The ABS participating permittee's agreement to indemnify the state against all losses/expenses due to its failure to reclaim.

- A list of any conventional bonds that supplement the ABS by type of document, number, date, and amount.

- For a voluntary ABS, a provision that does not allow cancellation of the ABS obligation unless replaced by another acceptable bonding method and in accordance with the administrative or operating rules of the system.

- The ABS participating permittee's written agreement to pay all periodic assessments of the ABS.

- The ABS participating permittee's written agreement to reclaim the operation according to the standards of the approved permit, statute and regulations.

II. FINANCIAL AND TECHNICAL

A solvent ABS should assure that the current income, assets, and projected revenues equal or exceed the current, projected, and incurred, but not reported, liabilities. In addition, the ABS should assure adequate funds to complete the reclamation for any and all forfeited sites without a preset cap placed on the accumulation of income unless it can be demonstrated that the ABS assets are sufficient to cover all potential reclamation liabilities. Income should keep pace with actual reclamation liabilities and accountable obligations.

1. Sources of Annual Income and Assets

Each source of income should be clearly documented in the description of the ABS including the expected percentage of total income that each will generate. Total available income from all sources should exceed total and potential liabilities. Income sources should be carefully examined and probably should not be limited to pay-as-you-go fee collections based on acreage or coal production. Income sources and the basis of the income formula should be explained. Some example sources follow with suggested factors to consider if the sources are used:

- Seed money - the source and rationale should be explained considering factors such as level of ABS membership, administrative expenses, accountable liabilities, forfeiture rate, etc.

- Front-end, one-time participation fees - the level and basis for assessment should be explained. These fees should at least cover the State's cost of processing ABS' member's application to participate.

- Production fees based on acreage or tonnage - the method, rationale, basis for the amount in light of accountable liabilities, and collection schedule should be explained, including whether fee payments are released to permittees when reclamation is completed and if so, how this is reconciled in the ABS accounting system.

- Retroactive assessments - the level, basis and initiating mechanism for retroactive assessments should be explained. Such assessments and the authority for them may be needed to enhance the financial solvency of the ABS or to provide sufficient funds to reclaim participant sites following the termination of the ABS.

- Fines and miscellaneous fees - penalty fines and miscellaneous fees may provide some income. If so, this needs to be documented, explained, and prudently accounted.

- State general revenues - If a state chooses to supplement the ABS with general funds, or underwrite the ABS, the sources and legal authority and continuing availability to meet liabilities should be documented and explained.

- Third party guarantors - ABS assets in the form of third-party guarantees should be documented. The business relationship and agreement between the permittee, the guarantor, and the RA should be explained.

- Potential and/or secured ABS assets in the form of assigned, contractual reclamation obligations in coal purchase contracts. If these exist, the terms, conditions and potential value of the asset should be explained and documented.

2. Expenditures and Liabilities

The ABS income should be adequate to pay the expenses associated with all liabilities including contingent and incurred liabilities, administrative expenses, and indirect costs related to reclamation. All expenditure and liability items should be documented and properly accounted for by the system. Examples of items that should be considered when analyzing and evaluating the level of income needed by the ABS:

- Administrative expenses - all potential costs to the RA that are absorbed by the ABS should be included in the system such as processing applications, accounting,

auditing, investing funds, monitoring, computer equipment, commission and board per diem and travel expenses, reviewing the ABS members' financial and business status, legal fees, reclamation contract management.

- Adequate reporting including annual audits, actuarial studies, annual and quarterly reports - all of these analyses are recommended on an ongoing regular basis to assure the ABS is operating as planned, and to assure that it is solvent. The costs associated with contracting any experts to perform these functions would need to be considered if the pool funds are used to pay for these services.

- Reclamation liabilities - These are the most significant expenditures related directly and indirectly to the reclamation of forfeited sites. These costs should be based upon actual historical costs or, if historical cost data is not available, abandoned mine land project costs, engineering estimates, reclamation plan cost estimates in permanent program permits, etc. In all cases, ABS income should be sufficient to cover the costs to reclaim forfeited sites at all times, including contract management and engineering re-design. ABS income should be sufficient to cover the cost of reclamation to permanent program standards including costs associated with reclamation activities conducted during long-term liability periods. All accountable liabilities, including an accounting of actual and incurred but not reported liabilities should be provided at all times by the system. The RA should explain at what time a reclamation default is considered a liability by the system.

- The forfeiture rate and the calculation of required income should be adjusted to account for and consider impending reclamation liabilities on an on-going basis. For example, forfeitures are often imminent for sites that are inactive, for sites that are active but have major compliance and financial problems, and are therefore close to forfeiture, and for sites for which a FTACO is outstanding for more than thirty days. Additionally, a prudent ABS should have a reserve of funds to pay for the reclamation of incurred but not reported liabilities.

- The ABS design should be flexible enough to adjust income levels when changes in the forfeiture rate and other economic conditions occur that would result in greater expenditures.

- Potentially catastrophic events such as subsidence, acid drainage, landslides, etc., should be considered in assessing ABS solvency or alternative mechanisms for abating such catastrophes should be specified.

- An inventory of acid mine drainage sites, if applicable, should be factored into the total liability exposure and accounted for when determining the required level of income.

- Facilities and ancillary areas - The ABS expenditures should consider the costs to reclaim facilities and ancillary areas. ABS based on coal production should carefully consider and demonstrate that reclamation of disturbed areas but non-producing coal acreage will be covered by the ABS.

- Special categories of mining - The higher costs incurred to reclaim prime farmlands, multiple seam operations, mountain top removal operations, and other special categories of mining, should be considered. Expenditures and income should accurately reflect these higher costs and the resulting increased liability.

3. Margin for error - Any prudent and financially sound ABS that includes numerous, complex variables may lead to erroneous conclusions if not considered in the analyses of the system. Failure of the system can result when actions are based on erroneous assumptions or a lack of implementation of the approved system. Factors that should be considered:

   - Fee collection - ABS's that base funding on a production basis (either per-acre or per-ton) may be susceptible to under-reporting which results in less revenue than originally projected. Therefore, the system should include an adequate method for verifying production. This should be explained. In addition, a contingency factor should be included in the system, and in the analysis of the system, to offset such under-reporting of production.

   - Other program elements - Numerous other errors can occur throughout this analysis and in actual implementation. Errors in certain assumptions may have a more critical (sensitive) effect than others. All program elements should be reevaluated to identify the most critical factors. Contingencies should be built into each factor to conservatively account for these factors.

- Reserve fund - The ABS should maintain adequate reserves to cover contingencies associated with errors and to cover other potential liabilities.

4. Risk Analysis

When establishing the required level of annual income, the RA needs to project the level of expenditures with respect to current, projected, and incurred but not reported, reclamation liabilities and related indirect costs. A number of different risk factors are currently employed in existing bond pools. All risk factors should be documented and explained in terms of the rationale and the statistical basis for their use in the income formula. Some examples are as follows:

- If the ABS is voluntary, the "good operator" risk factor - needs to be defined, including what specific criteria are applied when this factor is used.

- Historical forfeiture rate factor - The RA should explain how this is derived and must also include adjustments for incurred but not reported liabilities and any other financial or economic conditions that will likely change or influence the forfeiture rate. The use of this factor should be explained in detail.

- Average operator forfeiture rate - use of this rate should be fully documented and explained. Use of this rate is generally based upon equal participation of all operators in the fund, and a complete failure of one of those operators in the early years of the system.

- Largest operator forfeiture rate - A solvent fund should be able to cover the risk of failure of the operator with the greatest reclamation exposure in the pool. This factor is similar to the "average operator forfeiture rate" in that it assumes that the largest operator is projected to fail in the early years of the fund. (This value should be adjusted at discrete periods of time). Use of this rate should be explained in terms of derivation and application.

- Catastrophic Forfeiture Rate - This factor assumes that some event would cause the financial failure of most participating permittees in the ABS. Events such as new legislation, long-term strikes, and a severe economic downturn could cause a failure of the industry participating in the ABS.

- The use of forfeiture rates may not be applicable when a mandatory ABS' income covers 100% of the total exposure.

- If a voluntary ABS exists, it may be prudent to consider the financial status and reclamation record of the participating permittees - To the extent that the financial solvency of the ABS participants is critical to the system, this is a factor to be considered in the risk analysis of the ABS. If applicable, the RA needs to verify that the permittee is registered to do business in the state, and that it is sound financially and meeting other financial tests as deemed necessary or prudent by the RA.
- Percentage of participation - another factor to be considered is the relative percentage of participation by any one company or family of related companies. The way the ABS will compensate for a high percentage of participation should be discussed.

III. ADMINISTRATIVE AND PROCEDURAL

1. Administration of the ABS

- If the RA manages, administers, or accounts for, the ABS it should adopt appropriate internal controls and safeguards to ensure that the authority to decide bond amounts, or take enforcement action, and to initiate and pursue forfeiture matters is exercised independently of the authority to manage, administer, and account for the alternative bonding system.

- Annual and semi-annual third party audits should be conducted of the ABS financial statements that report income and expenses to assure use of prudent and generally accepted accounting principles.

2. Accounting and auditing

Accounts established by the RA for the administration of the ABS should be dedicated for expenditures only on sites covered by the ABS.

- The account should be readily available to the RA or the designated ABS administrator without inordinately time-consuming approvals being needed from the legislature or any other entity.

- The RA should generate annual and quarterly financial statements of the ABS in accordance with generally accepted accounting and actuarial principles.

- The RA should specify how ABS funds will be invested and whether funds are insured.

- The RA should adopt legal, financial, managerial, actuarial, and investment practices as may be necessary to ensure sufficient funds to complete reclamation of any ABS site that may be in default at any time.

- In addition to annual audited financial statements, a financial analysis report should be prepared that gives a status report of the ABS' capital structure, assets, liabilities, income received, liquidity, costs incurred, and reclamation obligations incurred but not reported. In addition to the above income and expenses, the report should include the estimated income level needed for the next calendar year, the number of abandoned sites, number of temporarily inactive sites in excess of one year, the number of FTACO's over thirty days and any bankrupt companies. In addition, the report should provide an inventory of the number of sites and acres covered, the number of sites in forfeiture and requiring reclamation, the time schedule for initiating the reclamation of these sites, and explanations about any ABS sites that were reclaimed to standards less than those specified in the applicable permit, Act, and regulations.

- An annual, independent audit should be conducted of the annual financial statements in accordance with generally accepted accounting principles.

- The RA should provide, initially and on a periodic basis, an independent actuarial opinion regarding ABS solvency.

- The RA's administrative procedures should include plans for meeting the requirements for expeditious and timely expenditure of funds for reclamation.

3. Bonding Schedules - If the ABS includes sites that are supplemented by conventional bonds on the basis of phased or incremental schedules, an explanation is needed as to how these methods are accounted for in the ABS. If they affect income levels, expenditures, or specific obligations, this needs to be documented and explained.

IV. CONCLUSION

This exercise was conducted in response to the Secretarial MBO on alternative bonding systems. A list of considerations was developed for analyzing and evaluating an ABS with respect to

meeting the regulatory requirement to have sufficient funds at all times. The list is not all inclusive. The considerations have been developed through the research of the ad hoc committee and supplemented with the advice of an internationally recognized actuarial consultant and the responses of the existing ABS State members to a July 31, 1990 letter of inquiry.

The identified factors for consideration should be used to evaluate an ABS in terms of the following:

- Whether the ABS is solvent and meeting its regulatory and contractual requirements.
- Whether the ABS is managed using prudent and generally accepted accounting and actuarial principles.
- Whether program implementation is adequate.
- The acceptability of models and projections
- Whether the level of risk is acceptable
- Whether the level of reserves is adequate

To evaluate the ABS properly, the following information from the RA would be helpful:

- A copy of the charter or document that sets forth the RA's authority and the operating rules of the ABS
- A description of the system including sources of income and anticipated or actual expenses
- A risk analysis of the ABS prepared by an independent actuarial
- An audit report prepared by an independent auditor on the RA's financial statements of the ABS
- A description of the ABS participants in terms of numbers, business experience, size, financial status, and compliance record
- A description of the RA's administrative procedures for managing the ABS