

Tillinghast

a Towers Perrin company

November 9, 1990

Mr. John P. Mosesso
Chief, Division of Technical Services
United States Department of Interior
Office of Surface Mining Reclamation & Enforcement
Washington, DC 20240

RE: Summary of Discussions Concerning Assessment of "Alternative Bonding Systems"

Dear Mr. Mosesso:

At your request, we reviewed the draft document on Alternative Bonding Systems (ABSs) which was prepared by the Office of Surface Mining Reclamation and Enforcement and was dated August 31, 1990. We reviewed this document as preparation for a meeting with you and several members of your staff held in our offices on September 21.

This letter summarizes the discussions of our September 21 meeting in which we provided our views on the draft document. We found your draft to be an excellent "first cut" at identifying and treating the various considerations appropriate in evaluating ABSs. The following summarizes the significant issues and concerns discussed during the course of our meeting. Some of these items are already considered in the draft document and in those instances our comments are intended to either amplify, emphasize, or extend what is already contained in the draft.

REQUIREMENT OF FEASIBILITY STUDIES: OSM may wish to consider including a provision which would require new ABSs to submit for OSM's approval a feasibility study prior to the establishment of an ABS. This feasibility study should address issues such as rate adequacy, surplus levels and operational arrangements sufficient to assure success of the ABS.

SELECTION (UNDERWRITING) CRITERIA: If the ABS system is voluntary within a state, OSM should review the underwriting criteria used in accepting and rejecting applicants to the ABS. The underwriting criteria should reflect the relative propensity for bond forfeiture of the various participants. The underwriting criteria should include,

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but not necessarily be limited to, the financial standing of the operator and its past reclamation record. Additionally, the ABS should provide the economic incentive for the permittee to perform the reclamation. This is generally assumed to be a requirement within the state primacy programs, which prohibit the issuance of further mining permits for operators which have failed to reclaim disturbed lands.

INVESTMENT RESTRICTIONS: The version of the draft provided for our review was silent on investment policy and restrictions. OSM may wish to consider imposing certain investment restrictions to insure prudent investment policies on the part of the ABSs. Such restrictions may limit the investments of the bond pool to either investments guaranteed by the United States government or by the several states.

LIMITING LIABILITY OF THE POOL: From an insurance perspective the ABS would be on a sounder financial basis if the issued bonds would have a limited penal amount. This would assist in limiting the large shock losses which could imperil the solvency of the ABS. However, from OSM's viewpoint, the requirement to reclaim the land to original standards (without a cap on liability) would better satisfy the intent of the law. An alternative solution would be to require that each ABS carry excess insurance above a certain amount, though there is no guarantee that such coverage will always be available in the commercial market.

ACID MINING AND DRAINAGE (AMD): AMD appears to be a significant threat to the solvency of ABSs. OSM personnel had suggested a funding of this liability through a separate mechanism (namely annuities), thereby segregating AMD liabilities from other more normal liabilities of ABSs. Other alternatives may include having the individual states provide financial backing to the bond pools for AMD costs only. This AMD problem is related to the issue of whether caps on the penal amount should be imposed by the ABSs.

RETROACTIVE ASSESSMENTS: The draft provided for our review did not include a provision for retroactive assessments in the event of termination of the ABS. OSM may wish to include a provision which will provide retroactive assessments to either enhance the financial solvency of the ABSs or to provide sufficient funds to reclaim participant sites following the termination of the ABS.

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Additionally, the draft document does not address the final disposition of the pool funds if the ABS dissolves beyond the requirement to reclaim the participants' sites. Along with the determination of the status of these terminal funds should be a requirement to assure that these funds remain available for a sufficient period of time to absolve the liabilities of the ABS (i.e., until all outstanding sites have been reclaimed). In addition, a provision should be included which would address the collection of any retroactive assessments.

STATEMENT OF OPINION CONCERNING FUNDING LEVEL AND RATE ADEQUACY: OSM may wish to consider including a requirement that a statement of actuarial opinion on both rates and reserves of the ABS be filed annually with OSM. An ABS assumes risk and should therefore be treated similarly to an insurance company. Property and casualty insurance companies are now required to submit annually to state regulatory authorities an actuarial statement of opinion concerning loss and loss expense reserves for the insurance entity. ABSs operate in a manner similar to insurance companies and the general principles that apply to insurance also apply to ABSs. We have attached the Statement of Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves and the Statement of Principles Regarding Property and Casualty Insurance Ratemaking adopted by the Casualty Actuarial Society. The principles contained in these two documents can and should be applied to any ABS. An actuarial opinion attesting to the appropriateness of the rates and loss and loss adjustment expense reserves would assist in promoting the solvency of these arrangements. The OSM may wish to require that such a statement of opinion concerning rate levels and reserve adequacy be provided by a Member of the American Academy of Actuaries (MAAA) or a Fellow of the Casualty Actuarial Society (FCAS). Such a requirement would assure that the individual providing the statement of opinion has met the necessary educational and experience requirements.

As background, the Casualty Actuarial Society was founded in 1914 and is the learned society for property and casualty actuaries in North America. Its purposes are to advance the body of knowledge of actuarial science in applications other than life insurance, to establish and maintain standards of qualification for membership, to promote and maintain high standards of conduct and confidence for its members, and to increase the awareness of actuarial science. One of its primary functions in fulfillment of these goals is to administer the series of examinations which must be passed for actuaries to become credentialed as casualty actuaries in this country.

The American Academy of Actuaries was founded in 1965 to bring into one entity all qualified actuaries in the United States. It serves as the public interface organization for the actuarial profession in the United States. Its primary activities include providing an actuarial perspective on major public policy issues to federal and state officials, promoting public awareness and recognition of the actuary's role in society, working with other related professions, and developing standards of professional practice.

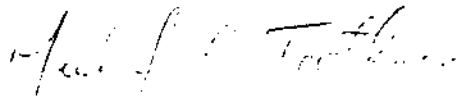
MARGIN FOR ADVERSE DEVIATION: ABSs should provide some mechanism to absorb deviations from the original or estimated loss value. This margin, or surplus in the instance of insurance companies, would provide funds for deviations above those expected in the pricing of coverage. This margin for adverse deviation should encompass at least process risk and perhaps both parameter risk and process risk. Parameter risk is the risk that the underlying assumptions concerning the expected value and distribution of losses may be incorrect. For example, should rates based on historical experience be subject to inflation forces different from those anticipated in the pricing analysis, actual experience may deviate from the expected values. Process risk is the risk of actual experience deviating from the expected values due to randomness. For example, should ABS suffer a large default at the outset of its operation, the margin for adverse deviation would provide a cushion to absorb such a process risk element.

INAPPROPRIATENESS OF PAY-AS-YOU-GO FUNDING: Funding which is based on a pay-as-you-go arrangement is unworkable as an ABS system for several reasons. If the ABS is a voluntary system and pending payments for reclamation costs are such that alternative bonding methods are more economically attractive to operators, the ABS will lack sufficient revenue to fulfill its obligations. Additionally, the ABS should adhere to accrual accounting methods. This would provide sufficient funds to reclaim disturbed lands in the event of an economic downturn, which would decrease the funding basis of the ABS. Furthermore, should the ABS be dissolved, a pay-as-you-go funding arrangement would not address the unfunded liability of the ABS which has been accrued through its past operations.

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We remain available to answer any questions you may have on the issues and suggestions summarized within this letter. In addition we have attached a summary of Tillinghast's qualifications and the array of services we provide to providers and purchasers of insurance.

Sincerely,



Michael L. Toothman, FCAS, MAAA

MLT/jfb