operations,<sup>44</sup> while putting the former on a standby basis. The rationale of the program would be "least cost to the economy," as opposed to affording relief to the mining operators by an indirect subsidy in the form of an increase in tariff duties.

The program would be aimed toward closing certain lead and zinc mines. Mine closures cause difficulties in terms of upkeep, as noted earlier. Moreover, some of the high-cost mines, particularly those producing lead and zinc ores with silver content, will wish to remain in production or in a standby condition.

The program also would have to have a "birth control" clause so as to avoid the bringing in of new mines, possibly of a marginal char-

acter, that would add to existing supply difficulties.

An important cost item in a readjustment assistance program in a mineral industry may be the "mothballing" of mines so as to keep them in standby condition for eventual reopening. The cost of such "mothballing" varies widely, from anywhere near 2 percent to 10 percent of the annual operating costs of the given mine. The major variables affecting the costs of standby arrangements are the wetness of the mine, and required pumping connected with it; and the hardness of the ground, which determines the cost of supports.

In the case of lead and zinc, such "mothballing" would certainly be

In the case of lead and zinc, such "mothballing" would certainly be more expensive than stockpiling: in a lead-zinc stockpile, the metals can be dumped at the appropriate location without cover—custodial services and financial expenses on initial outlay constituting the only costs in addition to the amount required for acquisition. Stockpiling, however, offers no solution for readjustment. If "mothballing" is indicated, and a decision to that effect cannot be taken on economic grounds alone, the mine should not be included in a trade adjustment program. Government assistance in "mothballing" can only be justified in terms of national security, and would thus fall outside the purview of trade adjustment.

It would seem, therefore, that temporary assistance for readaptation, either in the form of tapering off grants or of loans from the Small Business Administration, would be the most economical way of solving the problem posed for the small lead and zinc mine opera-

tor by increased imports.

## ANOTHER PROPOSAL

A variant of this proposal could take the following form: 44a It would entail purchase of mineral and surface rights from marginal mineowner-operators, in return for their going out of production and having the mines withdrawn, while they undertake to seek other more profitable pursuits (possibly with temporary import controls). Such a program could be so designed that a computer could provide continuous performance check on the basis of available information. A separate agreement would be made with each mine to be withdrawn,

<sup>&</sup>quot;This method reportedly has been employed by captive fluorspar mining operations. Also, in the case of fluorspar mining in the Illinois-Kentucky district, small companies or individuals with limited capital have been working side by side with larger producers. As cost of production has increased in recent years, there has been a trend toward acquisition of many of the individual properties by a few financially strong concerns. (See U.S. Tariff Commission, "Fluorspar," investigation under sec. 332 pursuant to resolution by Senate Finance Committee, Washington, D.C., June 1955, pp. 51–52.) No tendency toward such a concentration of ownership has been reported in lead and zinc mining.