

past couple of days and I would like to note it again. It published this report recommending that we do two things, that we prevent future damage and repair past damage, and then it outlined the need for both fundamental and applied research to "insure technological progress in mined-land reclamation and conservation."

The report went on to cite several areas in which fundamental research should be expanded and I would like to stress two of them that I will speak briefly about, acid formation and ground-water hydrology.

This report noted that applied research, in addition to fundamental research, should be investigated in several different areas. These I have itemized here, and stated that demonstration sites should be provided.

Senate bill 3132, as you know, would provide the authority to put some of these recommendations into practice. This legislation provides that State plans for regulation of surface mining should be formulated, and, going on down, it provides for a system of permits, control of adverse effects, reclamation of disturbed areas, evaluation of environmental changes, and adequate funding and staffing for the program, including enforcement. Indiana University Water Resources Research Center supports these provisions.

With regard to another provision, however, that State plans must be submitted to the Secretary of the Interior for approval, one might question, as I do, the advisability of such apparently complete Federal control over regulatory matters, as specified in sections 8 and 9 of S. 3132, which belong, first of all, to the States.

It is true that the bill provides ample mechanisms for the States to take the necessary positive steps which would avoid such heavy reliance on the Federal Government. These provisions should assure that we do continue to move toward this goal of the best reclamation of surface mined areas; but even if it is held advisable that such Federal control should be exerted, we at Indiana University question the 2-year time limitation for the State to develop its approved regulations, else the Secretary of the Interior will develop his own set for that State.

We question the present state of knowledge of many facets of the relationship of surface mining to the environment which we think is not sufficient to permit adequate regulations to be written regarding those variables. This knowledge is being provided by current research, but often such research not only modifies previous views but may even threaten the existence of some of our sacred cows.

Therefore, any set of regulations, whether they are Federal or State, should be looked upon as only provisional or temporary and subject to modification as the results of research become available. Accordingly, I should like to urge the committee to consider providing for a national biennial review of research results with the view of possible revision of the State laws and regulations of surface mining reclamation.

At this point, by the way, I might cite again the surface mining report of the Department of the Interior is stressed on page 76 and this would refer to section 14 of the act.

Several examples of the sacred cows that I just mentioned could be cited in the area of hydrology as related to surface mining; but I