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Conservation and the Minerals Industry

Mining and materials transformation are activities that must be carried on with public consent. They are undertaken to fill social needs and purposes. If raw material production and consumption are antithetic to other societal values, the public must choose among them. Today many conservationists and a growing fraction of the public feel that the production and use of minerals and mineral fuels is damaging the environment to an unacceptable extent. At the same time, those who are responsible for meeting the public's demand for materials and energy are fearful that their tasks may soon become impossible because of various legal impediments.

We must search for alternatives that will permit man to enjoy the benefits of industrialization without creating irreparable environmental damage. One effort in this direction was a recent conference* that brought together a diverse group including members of the Sierra Club and representatives of industry. To focus on a manageable area, discussions were limited in scope. They did not touch on such matters as the population explosion, agriculture, or consumer-product manufacturing. As might be expected, participants brought to the meeting divergent views and left the conference with their prejudices not much altered. However, there was consensus on some matters. The conferees agreed that continued exponential growth in use of materials and energy is unsustainable. As individuals they found that their needs for material items were close to being satisfied. It was pointed out, though, that the participants were drawn from the middle class or above and that others in this country—and especially elsewhere—have many unfulfilled material desires. Efforts to attain universal affluence may create major worldwide environmental problems for which the United States cannot dictate solutions. The conferees agree that in efforts to preserve our own environment we should not export our pollution problems.

Conferees agreed that the environmental problems arising from production of energy tower above others related to the extractive industries. Mining of ferrous and nonferrous minerals affects comparatively limited areas. The processing of such materials has larger effects, but these are now being curtailed. By the end of this decade we will be using smaller quantities of a diminishing reserve of U.S. oil and gas, but atomic energy will not be ready to fill the gap. We will probably find it necessary to burn coal in increasing quantities. Coal mining, especially strip mining, has led to considerable pollution and to destruction of some areas, such as steep slopes in Appalachia. Where the land is flat, as in much of the Middle West, it can be restored. Conferees agreed that strip mining of steep slopes should be stopped. Implicit in this view is the concept that exploitation of land sometimes should be curtailed in the common interest.

All the conferees were agreed on the desirability of diminishing damage to the environment. The industrial representatives were joined by most of the conferees in being concerned about the multiplicity of regulations that are being implemented both nationally and locally. We need a reasonable framework so that the actions desired from industry will be in its own best self-interest. For example, we have not moved far enough or fast enough in the enactment of taxes on effluents.

A final view that had much support was that it is possible to be constructive in the use of land. One can take from it and give back to it. In many instances man can improve on nature. Planning, thought, and effort will make a great deal of difference in our effect on the environment.—PHILIP H. ABELSON

* The conference was organized by the American Geological Institute, with support of the National Science Foundation, and was held 10–13 June 1971. A summary of the proceedings of the conference will be available for distribution at a later date. Requests should be sent to the American Geological Institute, 2201 M Street, NW, Washington, D.C. 20037.