One aspect of this subject that needs to be examined is how U.S. national security policies affect the decision to obtain minerals from domestic rather than foreign sources.

Domestic production of all the raw materials needed by the United States has never been an attainable U.S. policy objective. However, U.S. production of many minerals has been effectively promoted by various kinds of encouragement (the word "subsidy" is not inappropriate). The history of the national stockpile program makes this abundantly clear (*1*). There is ample evidence that the stockpile program has, on occasion, provided support for the domestic production of certain minerals in excess of national security objectives, while the acquisition of scarce materials from foreign sources has been discouraged (*2*). National security objectives have thus become entangled with domestic and regional economic interests.

National security policies, through their impact on the domestic minerals industry, can significantly affect the environment. Knowledge of the environmental effects of alternative national security policies is essential to an understanding of the total environmental impact of the minerals industry. Particularly in debates about national energy policy and the oil import quota system, the paucity of knowledge about the possible effects of alternative energy policies is staggering (*3*). Analytical frameworks are needed for assessing the probability, duration, and intensity of an interruption of foreign petroleum supplies so that plans for alternative methods of adjusting supply and demand can be prepared (*4*).

The oil import quota method of assuring national security reserves through support of excess domestic capacity has been convincingly scored as a poor method of assuring petroleum reserves for national security (*5*). A much better alternative might be a system of government-owned natural reservoirs, strategically located and ready to produce on short notice. Such a system would have less impact on the environment, could provide more security at a lower cost, and the burden borne by citizens could be distributed more equitably (*6*). It would also benefit the economic development of countries that export petroleum, whose revenues would increase as a result of greater U.S. imports. Many of these issues are discussed in the report of the President's Task Force on Oil Import Control, which recommended a phase-out of the oil import quota system (*7*).

The oil import quota system has probably hastened the adoption of nuclear power generating facilities, as well as the commercial production of oil from western oil-shale deposits, the drilling of high-cost offshore oil wells, and the drilling on the north slope of Alaska. Research on the relationship between national security policies, domestic mineral industries, and the natural environment is badly needed.

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References

1. G. I. Snyder, *Stockpiling Strategic Materials: Politics and National Defense* (Chandler, San Francisco, 1965).
2. U.S. Senate, National Stockpile and Naval Petroleum Reserves Subcommittee of the Committee on Armed Services, *Inquiry into the Strategic and Critical Material Stockpiles of the United States: Draft Report on the National Stockpile* (88th Congr., 1st session, 1963).
3. *U.S. Energy Policies: An Agenda for Research* (Staff report, Resources for the Future, Washington, D.C., 1968).
4. W. F. Lovejoy, *Quart. Colo. Sch. Mines* **64**, 145 (1969).
5. S. L. McDonald, *ibid.*, p. 157.
6. W. J. Mead and P. E. Sorenson, *Land Econ.* **47**, 211 (1971).
7. U.S. Cabinet Task Force on Oil Import Control, *The Oil Import Question: A Report on the Relationship of Oil Imports to the National Security* (Government Printing Office, Washington, D.C., 1970).

Test Bias Bibliography

Reference 6 in Clark and Plotkin's response (Letters, 24 Dec., p. 1278) to Stanley's article of 19 February (p. 640) contains the statement:

Accustomed as we have become for our study to be the launching pad for ETS papers, we were shocked to find that in the latest bibliography of test bias compiled by ETS (*TM Reports No. 2*, 1971) our study is not listed. Our problem now is to decide which is worse, misrepresentation or oblivion.

The introduction to TM Reports No. 2 states:

The bibliography is limited primarily to material which deals directly with the question of test bias; for example, research reports or commentaries. It does not list reports which are primarily descriptive in nature, such as normative studies of tests on two or more culturally or geographically different groups.

Clark and Plotkin's book, *The Negro Student at Integrated Colleges* (National Scholarship Service and Fund for Negro

Students, New York, 1963), does not, in the judgment of our staff, deal directly with the question of test bias; therefore, it was excluded from the bibliography.

Further, TM Reports No. 2 *Test Bias: A Bibliography* is not an ETS paper but a report issued by the ERIC Clearinghouse on Tests, Measurement, and Evaluation, which is conducted for the U. S. Office of Education by the Educational Testing Service.

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Antilead Regulations

In his report "Lead poisoning: combating the threat from the air" (News and Comment, 5 Nov., p. 574) Robert J. Bazell states that the New York City antilead gasoline law is the only regulation of its kind in the country.

The City of Buffalo passed an antilead ordinance that was signed into law in December 1970. After Buffalo's law, the first in the nation at any governmental level, was adopted, the State of Maryland and Orange County, California, also passed similar laws.

New York City is to be congratulated for its highly restrictive law, but not necessarily for its pioneering efforts.

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Kansas State University

Deborah Shapley's report (News and Comment, 19 Nov., p. 803) on Kansas State University (KSU) was overall a very fair account, and we were delighted to see it in print. However, I would like to suggest that KSU's history department has come a long way on a small budget. Not only does it include doctoral programs in the history of science, technology, and military affairs, with support from the political science faculty, but in addition the department also publishes two journals, *Military Affairs* and *Aerospace Historian.*

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Energy Conservation

There may be more voices crying in the wilderness about unrestrained energy demands than John Walsh (News and Comment, 1 Oct., p. 44) thinks. In a number of courses at the experimental Residential College of the University of Michigan, we are examining the possible relation of energy conservation to changes in life-style and technological adaptation in urban development. Such changes, we believe, would enhance the quality of life rather than cause its decline. We emphasize the necessity for parsimonious use of energy, especially that derived from fossil fuels (not necessarily zero power growth although that is an appealing epigram).

Our urban society is a profligate abuser of energy resources. Urban components, whether skyscraper office towers or suburban subdivisions, are designed as though energy for space heating and cooling and for transportation were limitless. The official pricing structures for coal, petroleum, and natural gas also reflect this assumption. Too many assume that when our present supplies are exhausted, other sources will be developed through sophisticated search and recovery techniques. The present enthusiasm for developing Alaska's North Slope oil reserve is a case in point. But fossil fuel supplies are finite, and their exploitation is fraught with ecological danger. Difficulties with safety and radiation disposal in atomic reactors now indicate that nuclear power is not the easy answer.

We need a commitment to minimize energy use that will permeate all strata of society including government. The question is not merely "a conflict between unrestrained growth and preservation of the environment" as John Walsh concludes. Rather it is the much larger problem of fitting our industrial economy into the frail ecological system of the earth's surface so that our society survives and does not exhaust itself in the greatest spending spree of all time.

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