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REPORT TO THE CONGRESS



BY THE COMPTROLLER GENERAL
OF THE UNITED STATES

UNITED STATES
GENERAL ACCOUNTING OFFICE



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Need To Develop A National Non-Fuel-Mineral Policy

Department of the Interior

Uncertainty exists over the permissible dependence of the Nation on non-fuel-mineral imports. The value of such imports has increased greatly over the last few years. GAO is recommending that the Department of the Interior take action that would help develop a clear national non-fuel-mineral policy.

This report also provides information which will be useful to the Congress for legislative oversight purposes and for decisionmaking on future U.S. policy concerning nonfuel minerals.

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-118678

To the President of the Senate and the
Speaker of the House of Representatives

This report concerns the need for a clear national policy on nonfuel minerals. Our review was prompted by the expressed interest of congressional members and committees about the adequacy of Federal efforts to deal with non-fuel-mineral problems.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget, and to the Secretary of the Interior.

A handwritten signature in black ink, reading "Thomas A. Statts".

Comptroller General
of the United States

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ABBREVIATIONS

AEC	Atomic Energy Commission
GAO	General Accounting Office
OMB	Office of Management and Budget
OPEC	Organization of Petroleum Exporting Countries
USGS	U.S. Geological Survey

D I G E S T

Because of rising concerns over the trend in mineral imports and the Nation's dependence on foreign sources for many materials, the Congress enacted the Mining and Minerals Policy Act of 1970. The act was intended to promote development of the domestic mineral industry, thereby reducing United States reliance on non-fuel-mineral imports.

Interior officials have stated that the act provides basic legislative guidance that can be used to help develop a national non-fuel-mineral policy. Interior's approach has been to see the act as a restatement of traditional responsibilities for research and development, information gathering, and geologic investigations.

GAO could not effectively evaluate the act's accomplishments because Interior has not structured long-range goals and objectives concerning expected achievements and has not developed quantifiable standards as to what constitutes a strong and stable domestic mining industry, including criteria for defining an acceptable level of imports. (See p. 6.)

Since passage of the act in 1970 the value of non-fuel-mineral imports, including processed materials of non-fuel-mineral origin, has increased. The United States depends on foreign sources, in whole or in part, for approximately 22 of the 74 non-energy-mineral commodities considered by the Department of the Interior to be most essential to our economy. Interior has predicted that by 1985 the United States will depend on imports for as much as half of its supplies of basic raw materials.

Interior has claimed that other laws, other agency programs, and other national objectives impede implementing the 1970 act. The Office of Management and Budget has indicated that

Interior is responsible for assessing potential conflicts and advising other agencies accordingly. However, Interior has not developed a comprehensive data base for such analysis or exercised review responsibilities in a regular fashion. (See p. 11.)

Interior, in supporting the 1970 act and in submitting annual reports in 1972 and 1973, expressed concern over the rising mineral balance-of-trade deficit and the growing reliance on foreign sources for minerals. When the third annual report was submitted in May 1975, however, Interior said the import trend by itself should not cause alarm; problems arise only when foreign sources become unreliable.

Interior's shift of position closely followed an Administration Task Force report on critical raw materials in December 1974 that concluded materials abound and raw material imports were safe. The shift of position by Interior and inaction by the Office of Management and Budget indicate that explicit actions to implement the Mining and Minerals Policy Act are not likely in the near future.

Following the oil embargo and non-fuel-mineral shortages experienced in 1973-74, the Congress established the National Commission on Supplies and Shortages, consisting of representatives from the Congress, the executive branch, and private industry. The Commission in late 1975 started assessing the Nation's overall position and adequacy of its institutions for dealing with the materials supply problems.

Previous GAO reports have recognized that no single existing agency can effectively formulate national non-fuel-mineral policy. Accordingly, GAO has often supported establishment of a Department of Energy and Natural Resources and a Cabinet-level Council on Materials. (See p. 4.)

Until such changes are brought about, however, or until the National Commission on

Supplies and Shortages identifies institutional changes to accommodate present and future policy formulation needs and until the Congress acts on these, it remains a basic responsibility of Interior to identify requirements for achieving a coherent national policy regarding nonfuel minerals.

Currently the Department of the Interior generally advocates a flexible policy under which the United States can move from one supply mechanism, such as imports, to another, such as substitution of domestic resources. Yet Interior's position on this matter is not clear. (See p. 19.) Further, steps to be taken to accomplish a flexible supply policy, on a timely basis, have not been spelled out.

GAO is recommending, therefore, that the Secretary of the Interior

- identify and evaluate laws and agency programs that affect maintaining and developing a sound and stable domestic mining and minerals industry,
- weigh trade-offs between the purposes of such laws and the Mining and Minerals Policy Act, and
- advise the National Commission on Supplies and Shortages, the Administration and the Congress, of changes in the regulations and/or pertinent legislation believed needed to strengthen development of a coherent national minerals policy.

GAO is also recommending that, until the Congress acts on expected recommendations of the National Commission on Supplies and Shortages, the Secretary of the Interior exercise leadership in clarifying national non-fuel-mineral policy. This should entail

- continuing analysis of the advantages and disadvantages of relying on imports for specific commodities, and

--formulating recommendations for specific actions and/or programs that may be needed to help reduce the Nation's reliance on imports whenever and wherever such reductions are possible and desirable.

Interior generally agreed with GAO's recommendations but said the Secretary of the Interior is already complying with some of them.

GAO believes that further efforts to clarify Interior's views on national non-fuel-mineral policy are needed, particularly as to developing quantifiable standards for a strong and stable domestic mining industry and criteria for defining acceptable levels of imports.

CHAPTER 1INTRODUCTION

Adequate supplies of natural resources are needed for the Nation's economy, either from domestic sources or imports, if the United States is to maintain and improve its standard of living. The U.S. economy demands over 4 billion tons of new mineral supplies each year--about 40,000 pounds per person. This amount, about 23 percent of world demand, is continuing to grow and domestic mineral production is not keeping pace.

Demand is also rising in developing and other industrialized countries as their economies grow and living standards rise, and competition among countries for available supplies is increasing. Moreover, easily found mineral deposits are being depleted, ore grades are declining, and mining and mineral extraction costs are increasing.

To offset the increasing gap between domestic supply and demand, the United States has been importing more mineral raw materials and processed materials of mineral origin. This is not a new phenomenon in the United States. But the issues have become even more important since the oil embargo imposed by the Organization of Petroleum Exporting Countries (OPEC), in the fall of 1973. M/S 61360

The Nation's major concern has been focused on the energy shortage and related fuel minerals--oil, gas, coal, oil shale, and uranium. But the other minerals, known as nonfuel minerals, from aluminum to zinc, are also important to our economy. While some nonfuel minerals are produced in abundance in the United States, many are not. Consequently, we are largely reliant on imports for some nonfuel minerals and totally reliant on imports for others.

Many complex factors must be considered in developing appropriate national policies, and chief among these are environmental concerns and the aspects of supply and demand. Many factors must be considered in any analysis regarding mineral policy, including a growing interdependence of countries, a generally weakened financial condition of the domestic and foreign minerals industry, problems of accessibility to potential mineral resource lands and ocean bottoms, and mineral taxation.

Of major interest is the trend evident in non-fuel-mineral imports and the need for an improved national

non-fuel-mineral policy. The interest over increasing imports was, in our view, an important factor in passage of the Mining and Minerals Policy Act of 1970.

MINING AND MINERALS POLICY ACT OF 1970

The Congress and the Nation have long understood that developing and maintaining a sound domestic mining and minerals industry is essential to national security and the welfare of the consuming public. This understanding has served as the basic thrust for much of the legislation and Federal programs dealing with the Nation's natural resources and mineral industries. Until 1970, however, the legislation and programs were individually aimed at some aspect of raw material problems and there was nothing that could be viewed as a national mining and mineral policy.

In 1970, concern over increasing demand and the fact that imports supplied over 75 percent of U.S. needs for 20 different mineral commodities provided the impetus for enactment of the Mining and Minerals Policy Act (Public Law 91-631). The act declares that it is the continuing policy of the Federal Government in the national interest to foster and encourage (1) development of economically sound domestic mining and mineral industries, (2) the orderly economic development of domestic mineral resources to meet industrial, security and environmental needs, and (3) mining, mineral and metallurgical research. However, the act provided no new authority or funding. It does direct the Secretary of the Interior to carry out the policy in accordance with other statutes authorizing such programs and to make an annual report to the Congress showing the state of domestic mining and mineral industries, trends in utilization and depletion of resources, and recommended legislative programs.

The sponsors of the legislation at first intentionally excluded the fuel minerals--coal, oil, gas, oil shale, and uranium--from the definition of minerals, designing the proposed legislation to cover the general non-fuel-mineral field. They believed the fuel minerals more properly fit into the energy picture along with hydroelectric power and solar energy and that the common factors peculiar to energy did not apply to minerals in general. They believed the problems of energy and the energy mix should be treated separately.

Energy minerals were finally included within the scope of the act. The legislative history of the act makes it clear, however, that the Congress intended the emphasis on

both fuel and nonfuel minerals should be equal or comparable so that emphasis on the energy minerals would not overshadow the "hard rock" mineral industry.

Chief aims of the Mining and Minerals Policy Act

The Congress did not expect that the act, in and of itself, would be a cure-all for the mineral industry. There was hope that enactment of the legislation might focus attention on the industry and require long-range planning and the establishment of long-range objectives. The Congress expected that, under the act, questions would be answered regarding the permissible degree of dependence on foreign supplies, import and export of minerals, stockpiling for emergency situations, taxation, manpower, health and safety and environmental quality, and the capability of the Nation to supply domestic needs.

62 In its report on the legislation, the House Committee on Interior and Insular Affairs stated that it expected ^{HSE 01900} the executive branch to act aggressively to implement the policy and that private industry would assume its responsibility in the extraction, production and fabrication of raw materials into finished products.

The Senate report on the act stated that the statements in the act were fundamental principles or objectives against which the executive branch could measure proposed action and against which the Congress could measure legislation. The Senate report stated that this policy is designed deliberately in general terms, recognizing the need for flexibility. The policy will require continued scrutiny and must be flexible to respond to changes in demand, economics, security, and environmental requirements.

NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES

While recent events have generated a broad goal of "self-sufficiency" or "independence" in the energy area, the desirability of a similar goal for nonfuel minerals is still being debated. The United States depends on foreign sources, in whole or in part, for approximately 22 of the 74 non-energy-mineral commodities considered by the Department of the Interior to be most essential to our industrialized economy and Interior has predicted that by 1985 the United States will depend on imports for as much as half of its supplies of basic raw materials.

3 Because of its concern over the development of materials policy, the Congress in September 1974 established the National Commission on Supplies and Shortages to identify and evaluate material and agricultural shortages. DLG cc 7-5
The Commission is to report on existing governmental policies affecting supply, economic stockpiling, and the development of a shortage information system. The Commission started its work in late 1975 and expects to provide advice and recommendations on some specific policy issues of interest to the Congress. One of the principal objectives of the Commission is to determine what institutional adjustments are needed to analyze economic needs for resources on a permanent basis.

We expect that the Commission's effort will give appropriate consideration to the non-fuel-mineral import trends. In this connection, we believe that the Department of the Interior can provide the Commission with important input.

PRIOR REPORTS

Previous reports have addressed certain problems in the Government's decision making process for materials. An April 1974 report on "U.S. Actions Needed To Cope With Commodity Shortages" (B-114824), contained recommendations on commodity policy processes to improve the Government's capability to monitor and forecast mineral activity. A report issued on December 2, 1975 (OSP-76-9), discussed "Federal Materials Research And Development: Modernizing Institutions And Management." These previous reviews have recognized that no single existing agency can effectively formulate national mineral policy.

Accordingly, we have on previous occasions supported establishment of a Department of Energy and Natural Resources and a Cabinet-level Council on Materials. DLG cc 697
Until such institutional changes are brought about, or until the National Commission on Supplies and Shortages identifies other institutional changes to accomodate present and future policy formulation needs with the Congress acting on them, the Department of the Interior remains basically responsible for filling a leadership role in mineral and materials policy formulation. By doing this Interior can assist other bodies, including the National Commission on Supplies and Shortages, and ultimately the Administration and the Congress in their consideration of the Commission's recommendations.

We issued a report to the Congress on January 29, 1976, entitled "U.S. Dependence On Imports Of Five Critical

Materials: Implications And Policy Alternatives" (ID-75-82.) The report studied five minerals obtained largely from foreign sources and concluded that at the time of our review the major foreign suppliers were not politically motivated to withhold supplies from the United States and were limited in the price increases that could be imposed.

The conclusions of the January 29, 1976, report to the Congress were aimed at creating a clearer perspective on certain imported minerals and having responsible agencies deal more appropriately with policy matters regarding the U.S. stance in resolving mineral disputes and recognizing the legitimate needs of producing countries. The report also stated that development of a U.S. mineral policy would require a different stance on different minerals. The principal factors that must be recognized include availability of suitable domestic sources, levels of imports, alternative sources of supplies, and whether prices are close to a competitive supply and demand situation.

Our current report, like the earlier reports on the subject of materials supplies, and continuing efforts of the Congress and the National Commission on Supplies and Shortages, points out the need for clarification of this Country's mineral policy.

PURPOSE AND SCOPE OF REVIEW

Because of (1) the broad nature of the Mining and Minerals Policy Act, (2) expressed aims of the Congress in enacting the legislation, and (3) difficulty of readily gauging effectiveness of Federal implementation actions, we made this review to obtain and to provide information which may be useful to the Administration for executive action and to the Congress for legislative oversight of future U.S. policy concerning nonfuel minerals. Our review was directed to the nonfuel minerals because of certain factors peculiar to the fuel minerals that generally do not apply to nonfuel minerals. GAO has issued and has underway other reports dealing with fuel minerals.

We examined documents, records, studies, and memorandums and interviewed officials concerning their activities and their role in helping to insure non-fuel-mineral supplies. We made the review at Department of the Interior headquarters in Washington, D.C., and at selected Interior field installations in the West. We visited the Bureau of mines Metallurgy laboratory at Reno, Nevada, and its information and mining research center at Denver, Colorado. We also visited Geological Survey field offices at Denver and at Menlo Park, California.

CHAPTER 2

IMPLEMENTATION OF

FEDERAL MINING AND MINERAL POLICY

Although Interior recognizes that the Mining and Minerals Policy Act of 1970 provides basic legislative guidance which can be used to develop a national non-fuel-mineral policy, it maintains that all of its programs further the mineral policy. Interior also argues that no specific change in departmental operations was or is required because no new authority or funding is provided by the act. In summary, Interior's approach has been to regard the act of 1970 as a restatement of departmental traditional responsibilities for such functions as research and development, information gathering, and geologic investigations.

Specific accomplishments carrying out the act's objectives cannot be effectively evaluated because the Department of the Interior has not structured long-range goals and objectives for expected achievements or developed quantifiable standards for a strong domestic mining industry or the acceptable level of imports.

Interior officials told us that the long-range goal and objective of the departmental minerals program is to maintain a sound domestic mining, minerals, metal, and mineral reclamation industry within the limits of our free market system. They said the goal would be measured by the level of profitability of the industry. They added that the objective of U.S. policy is a continued flow of materials to satisfy domestic demand at reasonable prices within the context of economic efficiencies, security needs, and environmental externalities. If that objective is met, they said, mineral policy would seem to have been successfully achieved.

GROWING RELIANCE ON IMPORTS

The First Annual Report, required by the Mining and Minerals Policy Act of 1970, was issued by the Secretary of the Interior in March 1972. It stressed the widening gap between domestic demand and domestic production for both fuel and non-fuel minerals over the period 1950-71.

The Second Annual Report, issued in June 1973, emphasized that development of domestic mineral resources was not keeping pace with demand, despite the Nation's vast resources. Domestic exploration continued a downward trend in 1972, while the mineral balance-of-trade deficit was increasing and could approach \$100 billion by the year 2000.

A Bureau of Mines study in September 1973 examined 21 non-fuel-mineral commodities representing over 90 percent of the value of all non-fuel-mineral imports. It showed that from 1968 to 1972 net imports increased for 9 of 21 commodities, remained relatively stable for 8, and decreased for 4. The study, recognizing the highly speculative nature of forecasting, projected that by the year 2000 the value of non-fuel-mineral imports could increase 5 times over the 1972 level, based on constant value.

Interior's third Annual Report, issued in May 1975, showed that imports of all raw and processed minerals increased substantially in 1974. In this regard, we obtained data from the Department of the Interior on the value of raw non-fuel-minerals and processed materials of non-fuel-mineral origin imported and produced domestically. The values, shown below, illustrate the change in the ratios of imports to domestic production for the years 1971 through 1974.

Value and ratio of non-fuel-mineral imports versus domestic production

<u>Year</u>	<u>Imports</u>	<u>Domestic production</u>	<u>Ratio</u>
	----- (billions) -----		
1971	\$ 6	\$ 80	1 : 13.3
1972	7	88	1 : 12.6
1973	9	107	1 : 11.9
1974	\$14	\$ 96	1 : 6.9

Despite the trend of increasing dependence on imports, Interior shifted its position from earlier reports by stating in the third Annual Report that the import trend by itself should not cause alarm; problems arise only when foreign sources become unreliable. Thus, the Department's apparent sense of urgency shifted from a focus on gross levels or amounts of imports to one of focus on the political factors involved in decisions to import.

However, a July 1975 report by the Geological Survey (USGS), which supplemented the Third Annual Report required by the Mining and Minerals Policy Act of 1970, warned that a sense of national urgency and public attention similar to that given to the energy situation should be directed to the non-fuel-mineral situation. The report contained information showing that in 1972 and 1973 the Nation's overall dependence on imports for 15 critical industrial materials, other than energy, was about 60 percent of consumption. It

also presented forecasts for the year 2000 indicating that dependence on imports can be expected to increase.

In addition to discussing many factors for improved domestic production, the USGS report viewed increasing dependence on imports as inescapable and presented what it considered as options available to the United States to insure adequate supplies of mineral raw materials.

- Diversification of overseas sources of supply.
- Government activities to assure access to foreign sources of supply, combined with steps by industry to increase overseas processing of new materials.
- A major economic stockpiling program by industry or Government for commodities, supplies of which are dependent on a few foreign sources.
- Restraint in consumption of the scarcer raw material supplies. Products and processes can be redesigned to use abundant rather than scarce materials.
- National and worldwide programs for recycling of metals.
- Bilateral technical assistance programs in mineral fields, financed by the United States.
- Placement of staff trained in mineral deposit and mineral industry development into U.S. missions overseas to insure accurate, up-to-date information on present and potential mineral supplies.
- Fostering of close cooperation between Government and industry. Industry's concern over short-term profits must be mixed with Government's longer range concern for continued economic and social progress and stability.

INTERIOR'S IMPLEMENTATION OF THE MINING AND MINERALS POLICY ACT

Several Interior officials in headquarters, at the Bureau of Mines, and USGS field installations told us their activities did not change as a result of the act. Headquarters officials said that the act's provisions had already been included in Interior's other authorities such as the Organic Act of 1910, making change unnecessary: the act's policy was a restatement of Interior's traditional responsibilities.

Interior's approach to insuring non-fuel-mineral supplies

The Department of the Interior traditionally has performed several functions such as research and development, data collection and analysis, and geological investigations to help industry supply nonfuel minerals. These missions are carried out in accordance with Interior's basic authorities such as the Organic Act of 1879 (43 U.S.C. 31) and the Organic Act of 1910 (30 U.S.C. 1) which created the Geological Survey and the Bureau of Mines, respectively--the two Interior agencies most involved with non-fuel-mineral activities.

Research and development is done primarily to advance mineral technology, to reduce pollution caused by mining and mineral processing, to recover and find new uses for waste material, and to minimize mineral needs through extending materials service life. Data collection and analysis involves developing supply and demand projections, consumption data, production statistics, and mineral reserve and resource estimates. Geologic investigations are done to advance the understanding of the earth's formation, especially in the United States, so that the mineral potential of its lands and marine areas can be appraised and problems stemming from unstable ground conditions and natural hazards can be solved.

Much of this work is done in Interior research centers and laboratories, and in the field. Results are usually published. Other information may be had from industry participation on projects and demonstration projects.

Interior's interpretation of the act's requirements

Except for the annual report requirement, we were unable to identify any major change in Interior's missions as a result of the act.

The Assistant Secretary--Energy and Minerals is responsible for implementing the act and the Bureau of Mines is the principal agency for carrying out this responsibility. Therefore, we directed questions to the Assistant Secretary and Bureau officials concerning implementing the act and what had been achieved under it.

The essence of the response from the Assistant Secretary's office was that the act can be considered as a re-statement and reemphasis of some traditional Interior responsibilities because it provided no new authority or

specific funding. Concerning accomplishments, many Interior initiatives were cited as relating to the act but nearly all were energy initiatives and most occurred after the oil embargo of 1973. The response contained no record of accomplishments relative to improvements in specific non-fuel-mineral industries as a result of the act.

The Assistant Secretary's office provided us a description of many statutes granting authority to the Department of the Interior for mineral-related activities and a listing of the numerous U.S. Government and international agencies which are involved directly or indirectly with mining and mineral matters. This information is included in appendixes I and II.

The Bureau of Mines Director told us the Bureau has attempted to fulfill the act's objectives through its research efforts and data collection and analysis programs. He said that no programs within the Bureau or Interior, however, are tied directly to the act to accomplish one or more of its objectives.

Another Bureau official informed us that everything Interior does is in support of the act. He said the requirements in the act are no different from those set forth about 60 years earlier in the Organic Act of 1910 which created the Bureau. Therefore, the Bureau's goals under the act are the same as its goals for all its programs and those which are set forth in its annual budget statements and in authorizations for the Bureau's research projects. Thus to determine accomplishments under the act, the entire accomplishment record of the Bureau must be reviewed.

The director of each field location we visited told us the act has not significantly affected their work programs. Essentially, they interpreted the act the way headquarters did. They said the type of work done in the field helps carry out the act's policy but that this work had been going on for many years before the act was passed.

For example, one Bureau field director stated no appreciable organizational or procedural change occurred at his activity since the act's passage. He said that the Bureau has always been interested in the objectives outlined in the act such as encouraging the development, conservation, utilization, and reclamation of domestic mineral resources.

POTENTIAL CONFLICTS BETWEEN MINERALS POLICY
AND OTHER NATIONAL OBJECTIVES

Neither Interior nor any other agency has comprehensive information on Federal laws, programs, or regulations with objectives that conflict with those set forth in the Mining and Minerals Policy Act.

The National Commission on Materials Policy published its final report, "Material Needs and the Environment Today and Tomorrow", in June 1973. The Congress created the Commission in 1970 to develop materials policy and the main theme of the reported policy recommendations was the need to strike a balance between goods production and protection of the environment.

The Commission recommended, in this regard, that the Congress require new laws to comply with the Mining and Minerals Policy Act and that the President require agencies to adhere to the act in administering their programs the same as they adhere to National Environmental Policy Act requirements.

The Office of Management and Budget (OMB) responded in a report to the Congress in April 1975, concurring with recommendations and stating that the Congress does not explicitly require compliance with the Mining and Minerals Policy Act of 1970 in adopting other legislation relating to materials policy and that no formal administrative mechanism exists to guarantee that agencies adhere to the act. However, OMB reported that Interior's Assistant Secretary--Energy and Minerals will be responsible for informing other agencies of the effect their proposed actions will have on the act.

As interpreted by us, the Commission's recommendations covered progress in present as well as proposed programs. However, OMB's response related only to proposed actions. Nevertheless, OMB's response clearly indicates that no one was formally communicating with other agencies on the relationship of mineral policy to other national policies and programs.

According to the Assistant Secretary--Energy and Minerals, about 15 departments and 30 agencies conduct programs with goals which inhibit or hinder mineral production. Prior to OMB's response to the Commission's recommendations, we asked the Assistant Secretary if the Department of the Interior had made a study to identify Federal laws or programs which contradict the objectives set forth in the Mining and

Minerals Policy Act. His office said that a study had not been done; however, Interior comments on laws, programs, regulations, and activities as they are encountered.

In August 1973 a group of various Government and private officials held a symposium under the aegis of the National Academy of Sciences to discuss mineral policy. During their meetings it was suggested that more frequent interagency communication on matters of mineral policy was needed. The group recommended that Interior take the lead in such efforts, using the Mining and Minerals Policy Act as a medium for this action.

In 1973, Interior achieved such coordination by a direct line of communications with the President, but this line, the Mineral and Material Policy Subcommittee chaired by the Assistant Secretary--Energy and Minerals, was dismantled. The subcommittee was one of four established by the Secretary of the Interior to assist him in his role as Chairman of the Committee on Environmental Resources--a standing committee of the Domestic Council.

A former Interior Assistant Secretary has said that the Domestic Council Subcommittee was intended to bring together a dozen or so key agencies so that uniform positions in the minerals and materials area could be achieved. He made his remarks on October 30, 1973, in testimony before the Subcommittee on Minerals, Materials and Fuels of the Senate Committee on Interior and Insular Affairs. However, a Bureau of Mines official who had been involved in the subcommittee's work told us in June 1975 that the subcommittee discontinued operations in late 1973 because the oil embargo occupied too much of Interior's time. Furthermore, no new group has been organized to perform the duties and responsibilities of the former subcommittee, although Interior in late 1974 and early 1975 did make presentations of some mineral matters to the Domestic Council itself.

As a final note on the potential conflicts among the Federal laws involved, a former Deputy Assistant Secretary of the Department of the Interior told us that the Mining and Minerals Policy Act had little effect on policy formulation. He hoped that the act would one day be regarded the same as the National Environmental Policy Act of 1969 in that all Federal agencies would be required to consider the mineral implications of their actions. Other Interior officials made similar observations.

CONCLUSIONS

The Mining and Minerals Policy Act provided basic legislative guidelines to be used in developing a national non-fuel-mineral policy. The act did not, however, provide the Department of the Interior with any new authority or sources of funds.

Nevertheless the Department is responsible for implementing the act. This assignment should involve maintaining comprehensive information on potential conflicts between mineral policy and development and other national objectives and analysing remedies to major conflicts.

The Office of Management and Budget has indicated the Department of the Interior is responsible for telling other Federal agencies about adverse effects on mineral policy and development. The Department has not yet exercised this responsibility.

RECOMMENDATION

We recommend that the Secretary of the Interior

- identify and evaluate laws and agency programs that affect maintaining and developing a sound and stable domestic mining and mineral industry,
- weigh the trade-offs between the purposes of such laws and the Mining and Minerals Policy Act, and
- advise the National Commission on Supplies and Shortages, the Administration and the Congress, of changes in the regulations and/or pertinent legislation believed needed to strengthen development of a coherent national mineral policy.

AGENCY COMMENTS

The Department of the Interior agrees with the recommendation but feels that it is already being complied with to some degree. Interior said, however, that as in all efforts limited by budget and personnel, the effort could be expanded only if additional resources were available. It said the priorities and benefits of such expansion must be considered in the context of other legal responsibilities. (See app. IV.)

We recognize that resource limitations and priorities, benefits, and other legal responsibilities must be considered

by Interior in any decision calling for program expansion. In working to implement our recommendation, Interior should justify the needed additional resources.

CHAPTER 3

POLICY CLARIFICATION OF IMPORT QUESTIONS

NON-FUEL-MINERAL IMPORT POLICY EVENTS

The Mining and Minerals Policy Act was enacted in part because of concern over U.S. mineral import policy. The House Committee stated in its report on the act that:

"* * * While it is not expected that the United States will ever be completely self-sufficient in minerals, nevertheless our objective should be to attain a degree of self-sufficiency consistent with the availability of our domestic resources."

Interior seemed for a time to support less reliance on imports in general because the first two annual reports under the act--of March 1972 and June 1973--strongly implied that the import trend was harmful to the country's well-being. For example the June report stated that:

"* * * despite our vast natural resources, we find increasing evidence that development of domestic mineral resources is not keeping pace with domestic demand, with consequent unfortunate effects upon the entire economy."

Numerous general recommendations were made in both reports to aid domestic mine production and processing.

Also in June 1973, the National Commission on Materials Policy advocated in its published report the following policy:

"* * * traditional U.S. economic policy be maintained by relying upon market forces as a prime determinant of the mix of imports and domestic production subject to considerations of public policy involving the national security, health and viability of domestic materials industries, and fair competition. Where costly and dangerous reliance upon imported materials appears the outcome of existing trends, the Government must intervene."

A theme of the Commission's June 1973 report was to strike a balance between goods production and environmental

protection. A response to the Congress on the Commission's recommendations of June 1973 by OMB essentially stated that the Secretary of the Interior was responsible for coordinating mineral policy and that Interior was taking steps to improve its capability to develop and analyze mineral policy options. (See app. III.)

In October 1973 OPEC imposed the oil embargo. Its major effects included a quadrupling of oil prices and further stimulation of anti-import policy sentiments. People began questioning whether there was potential for large price increases in other heavily imported commodities. They pointed to the formation of producer organizations similar to OPEC as indicators that the United States was in further danger of supply interruptions.

As a result, interest increased in examining domestic import alternatives. These include recycling of wastes to recover minerals; substituting plentiful materials for those in short supply, such as renewable in exchange for nonrenewable materials; increased exploration and development, especially in Alaska; deep seabed mining for copper, nickel, cobalt, and other minerals; and the development of ways and means to reduce demand, such as through technology to make materials last longer. In 1974 Members of the Congress introduced bills to accomplish some of these alternatives but few passed.

Also, in March 1974 President Nixon directed a special Administration task force to identify and assess potential threats to imported raw materials, so that effective policy decisions could be made. The task force report 1/ concluded that minerals abound and raw material imports are safe. According to this special report:

"The best available data and analysis indicate there are ample materials available in the earth's crust to meet the world's needs for nearly every material well beyond the remainder of this century * * *"

* * * * *

"Embargoes or raw materials are highly unlikely. They do not make economic sense in terms of producers' revenue objectives. The objective of increased revenue argues for selling at a high

1/ "Special Report: Critical Imported Materials," Council on International Economic Policy, December 1974.

price rather than denying the product altogether. An embargo, however, may be undertaken for political reasons, as in the case of the Arab oil producers. If the politically inspired embargo is to be sustained, the producing countries must also have economic muscle. The Arab oil producers had both political desire and economic strength. This combination was not found in any other group of producer countries we have examined. In particular, a realistic basis in political interests for an export embargo action by producers is difficult to identify."

A Bureau of Mines official told us that this report established the framework for future policy on nonfuel minerals not only for Interior but for other agencies as well.

In late 1974 the Congress established the National Commission on Supplies and Shortages, consisting of representatives from the Congress, the executive branch, and private industry. One of the objectives of the Commission is to determine what institutional adjustments are needed to analyze economic needs for resources on a permanent basis. The Commission in late 1975 started assessing the Nation's overall position and the adequacy of its institutions for dealing with the materials supply problem.

NEED FOR IMPORT POLICY

The need for an import policy has not been convincingly established because the effects of disruptions in supply and distribution of non-fuel-mineral imports have not been demonstrated. For example, the widespread shortages of raw materials in 1974 were not due to the lack of proven mineral reserves or mineral resource exhaustion as some feared but to economic factors such as speculative buying as a hedge against inflation and price controls. Furthermore, arguments that non-fuel-mineral resources are dwindling are frequently countered by people who believe that resource availability is essentially dependent on price--as price goes up, resources become more available.

Ever-increasing reliance on imports of nonfuel minerals may not be desirable. The implications of this trend should therefore be carefully analyzed when establishing a non-fuel-mineral national policy. In this regard, the Geological Survey in its "Mineral Resource Perspective 1975," states:

- U.S. raw material consumption is declining as a percent of total consumption. Thus, other countries are consuming more of the total supply and competition for a fixed supply of nonrenewable resources is increasing. Between 1945 and 1972, world consumption of 18 basic mineral commodities increased about 6 times while U.S. consumption less than doubled.
- World population is multiplying rapidly, placing new demands on a limited mineral supply.
- Producer nations today are less willing to export raw materials. They prefer rather to add value to these raw materials by exporting processed materials of mineral origin.
- Industrialized nations such as France, Japan, and Germany help their firms negotiate with producer nations. U.S. industry, however, negotiates by itself for access to available foreign supplies and is therefore believed to be in a less competitive position than government-supported firms of other industrialized nations.
- The belief, "***that the Earth's crust is an infinite storehouse that can readily be tapped for new supplies of all kinds of mineral raw materials by either raising the price or developing new technology***" is widely misconceived. Availability is the most fundamental factor of mineral supply; mineral concentrations, however, are rare and even low-grade deposits are unusual.
- Raising the price is complicated because price hikes do not always increase mineral supply. Although a higher price enables companies to mine lower grade ores, the lower grade ore yields less concentrate during a given unit of time than the higher grades.

Importance of these points for the future can only be speculated upon, but they indicate that mineral demand is rising, competition for minerals is increasing, mineral costs will go up, and minerals will be harder to find as the high-grade ores become depleted.

Views on import dependence

The annual report under the Mining and Minerals Policy Act of 1970 issued in May 1975 seems to represent a major departure in Interior's attitude toward imports. Absent

from the report are expressions of concern about the increasing gap between domestic production and demand. These expressions were evident in the two previous reports.

In fact, the 1975 Annual Report states that even though many important minerals are imported, this should not be alarming; the problems arise when foreign sources become unreliable. Although contrary to earlier positions, this view is consistent with the findings of the special report previously discussed. (See p. 16.)

Present policy appears to be to monitor individual commodities for the purpose of taking action when shortages occur. The Secretary recommended in the 1975 Annual Report that the Government

- continue to determine minerals that are areas of vulnerability,
- assess the effects of shortages which occur,
- develop policy options, and
- consider appropriate combinations of such alternatives as domestic production, agreements to secure imports, and recycling.

The Secretary also advocates a flexible mineral policy. While none of the details or mechanics of such a policy were discussed, material in the report suggests that a flexible mineral policy is one in which the United States can move swiftly from one supply mechanism--imports, for example--to another, such as substitution. How this is to be accomplished, however, and what steps are to be taken so that such substitution can be accomplished promptly were not spelled out.

On July 17, 1975, the Assistant Secretary--Energy and Minerals testified before the Subcommittee on Mines and Mining of the House Committee on Interior and Insular Affairs regarding a reform of the mining laws. He reiterated the need for a flexible mineral policy stating that long leadtimes are required to produce minerals in the event that changes in our mineral position cause problems. The Assistant Secretary however did not elaborate on the meaning or details of this flexible mineral policy.

The Assistant Secretary spoke out against imports. He said that the Nation has a stated policy of reducing its dependence on oil imports and that some other mineral commodities are obtained primarily from foreign sources. He said

further that some of these imported commodities are subject to artificial price rises and supply disruptions and that we must look for domestic sources rather than encourage supply from abroad which could be disrupted. Comments such as this, in light of the 1975 Annual Report, raise further questions concerning what is meant by a flexible mineral policy.

In Interior comments on this GAO report, (see app. IV.) it stated that present policy is to monitor individual commodities, prepare for necessary action to counter or preempt specific undesired conditions and then to take appropriate action when and if the specific condition occurs.

Such a policy seems essential in any attempt to forecast supply and demand for specific commodities and to plan efforts to adjust for any projected imbalance. It does not, however, adequately clarify for the Nation the persistent questions regarding whether there can or should be stronger development of the domestic mineral industry or whether continued growing reliance on overseas sources is desirable either in general or by commodity.

CONCLUSIONS

The United States is still undecided whether specific measures should be taken toward further development of the domestic mining and minerals industry for nonfuel minerals. The Mining and Minerals Act of 1970 contains a call for a maximum commitment to develop a domestic industry capable of supplying greater self-sufficiency. There is another posture--inferred by recent executive branch positions--that there are ample materials available to meet the world's needs for nearly every material well beyond the end of the century and that export embargo actions by producing nations are highly unlikely. Such a posture argues against a full scale effort to develop and support a stronger domestic industry on all fronts.

Which policy or what combination of policies should be chosen is not clear. Mechanisms still do not exist within the executive branch to provide the analysis necessary to guide policy choices.

Perhaps this can, in part, be blamed on the fragmented nature of the problem and the current executive branch organization. However, until a Department of Energy and Natural Resources and a Cabinet-level Council on Materials are established, or until the National Commission on Supplies and Shortages identifies and the Congress acts on other institutional changes needed to accommodate present and future

policy formulation needs, the Department of the Interior will, of necessity, continue to have the key leadership role in minerals and materials policy formulation.

RECOMMENDATION

Accordingly we recommend that the Secretary of the Interior exercise his leadership role in clarifying Interior's position on a national non-fuel-mineral policy. As a minimum this should entail (1) continuing analysis of the advantages and disadvantages of relying on imports for specific commodities and (2) formulating recommendations for specific actions and programs that may be needed to help reduce the Nation's reliance on imports whenever and wherever such reductions are possible and desirable.

Such developments by Interior would help the Congress in its consideration of various proposed legislation and should materially aid the National Commission on Supplies and Shortages in its review of permanent resource needs.

AGENCY COMMENTS

The Department of the Interior concurs with the recommendation but states that it has been carrying out such action. Interior stated that there appears to be a basic difference of views as to how much to specify details of a clear national non-fuel-mineral policy, particularly regarding permissible import levels.

Interior pointed out that we stated in an earlier report that domestic production, in and of itself, is not always an attractive alternative to imports, and that when practical the United States should continue to adhere to a policy of lowest cost acquisition.

We fully recognize, as shown in our earlier reports on this subject, that many pertinent factors should be considered in any policy assessment, including availability of suitable domestic sources, levels of imports, alternative sources, and whether prices are reasonable.

Therefore, we believe that further efforts to clarify Interior's views on national non-fuel-mineral policy are needed, particularly with regard to development of quantifiable standards as to what constitutes a strong and stable domestic mining industry and criteria for defining acceptable levels of imports.

BRIEF DESCRIPTION OF STATUTES
GRANTING AUTHORITY TO THE DEPARTMENT
OF THE INTERIOR

RESEARCH-INVESTIGATIONS-EXPLORATION

Organic Act of the Bureau of Mines
(30 U.S.C. 1,3,5,6,7, May 16, 1910)

The act, which established the Bureau of Mines in the Department of the Interior as a bureau of mining, metallurgy, and mineral technology, authorized the Bureau to (1) conduct inquiries and scientific and technologic investigations concerning mining and the preparation, treatment, and utilization of mineral substances to improve health conditions, and to increase safety, efficiency, economic development, and conserve resources in the mineral industries; (2) conduct inquiries into economic conditions affecting such industries; (3) investigate explosives and peat; (4) investigate mineral fuels and unfinished mineral products belonging to or for the use of the United States; (5) disseminate information on these subjects; and (6) publish, from time to time, reports of inquiries and investigations with recommendations concerning the causes and prevention of accidents and the improvement of conditions, methods and equipment, with special reference to health, safety, and the prevention of waste in the mining, quarrying, metallurgical and other mineral industries; the use of explosives and electricity, safety methods and appliances, and rescue and first aid work in such industries; and the causes and prevention of mine fires.

Organic Act of the Geological Survey
(43 U.S.C. 31,41, March 3, 1874)

The Director of the Geological Survey, under this act is authorized to classify the public lands, to examine the geological structure, mineral resources and products of the national domain, and to publish geological and economic maps illustrating the sources and classification of the lands, and to report upon general and economic geology and paleontology.

Acquisitions and Development of Strategic Raw Materials

The Secretary of the Interior is authorized under section 7 of the Act of June 7, 1939, (1) to make scientific, technologic and economic investigations concerning the extent

and mode of occurrence, the development, mining, preparation, treatment and utilization of ores and other mineral substances, found in the United States or its territories or insular possessions, essential to the common defense or industrial needs of the United States, and the quantities or grades of which are inadequate from known domestic sources, to determine and develop domestic sources of supply, to devise new methods for the treatment and use of low-grade reserves, and to develop substitutes for such essential ores and mineral production and (2) on public lands and on privately owned lands with the consent of the owners, to explore for and demonstrate the extent and quality of deposits of such minerals, including such work and tests as may be necessary to determine the most suitable method of mining, beneficiation, and cost of production.

Research Centers and Laboratories

The establishment and maintenance of mining research centers and laboratories are authorized by the following acts:

Act of March 3, 1915 (30 U.S.C. § 8)

Act of March 25, 1948 (30 U.S.C. §§ 401 - 404)

Act of June 21, 1950 (30 U.S.C. §§ 411, 412)

Coal Research and Development Act
of July 7, 1960 (30 U.S.C. 661-668)

This act directs the Secretary of the Interior to establish an Office of Coal Research, and through such Office develop new methods of mining, preparing and utilizing coal; and to contract for, sponsor, and promote the coordination of such research.

Subbituminous and Lignite Coals and Peat
(30 U.S.C. 4, 4c, February 25, 1919
and May 15, 1936)

The Act of February 25, 1919, as amended, and the Act of May 15, 1936, provide the Secretary with authority for experiments and investigations concerning subbituminous and lignite coals and peat, looking to the efficient utilization of such coals and the derivation of products from them.

Solid Waste Disposal (42 U.S.C. 3251-3259)

The Solid Waste Disposal Act deals with solid waste disposal problems resulting from the extraction, processing or

utilization of minerals or fossil fuels when the generation, production or reuse of such waste is or may be controlled within the extraction, processing, or utilization facility or facilities and where such control is a feature of the technology or economy of the operation.

The act authorizes the Secretary of the Interior to conduct research, collect and disseminate information, enter into contracts and make grants-in-aid to public or private agencies and institutions for research, training projects, surveys and demonstrations.

Fish and Wildlife Coordination Act,
as amended (16 U.S.C. 661-665)

U.S. departments or agencies are required to obtain the comments of the Fish and Wildlife Service concerning the prevention of loss or damage of wildlife resources prior to any authorization of the impoundment, diversion, channel deepening or other modification or control, including navigation and drainage, of any navigable stream or other body of water. The Secretary of the Interior is authorized to make investigations to determine the effects of domestic sewage, mine, petroleum and industrial wastes, erosion, silt, and other polluting substances on wildlife, and to make reports and recommendations to the Congress for alleviating dangerous and undesirable effects of such pollution.

Minerals Exploration Program Act
of August 21, 1958 (30 U.S.C. 641-646)

This act authorizes the Secretary of the Interior to enter into contracts with individuals, partnerships, corporations or other legal entities to provide Federal financial assistance to exploration projects for such minerals, excluding organic fuels, as he shall from time to time designate.

MINE FIRES AND RESTORATION

Control of Coal Mine Fires
(30 U.S.C. 551-558, August 31, 1954)

This authorizes the Secretary of the Interior to conduct research relating to the causes and extent of outcrop and underground fires in coal formations and to plan and execute projects for putting out such fires.

Mining Area Restoration (40 U.S.C.
APP., 205)

Section 205 of the Appalachian Regional Development Act of 1965, as amended, authorizes the Secretary of the Interior to make financial contributions to States in the Appalachian region to (1) seal and fill voids in abandoned coal mines and abandoned oil and gas wells, (2) reclaim and rehabilitate lands affected by strip and surface mining and the processing of coal and other minerals, including lands affected by waste piles, (3) plan and execute projects for extinguishing underground and outcrop mine fires in the Appalachian region, or (4) make grants to States for carrying out such projects.

Anthracite Mine Drainage and Flood Control
(30 U.S.C. 571-576, July 15, 1955)

This act, as amended, authorizes the Secretary of the Interior to make financial contributions on the basis of programs or projects approved by the Secretary to the Commonwealth of Pennsylvania to seal abandoned coal mines in those instances where such work is in the interest of public health and safety and for control and drainage of water which, if not so controlled, will cause flooding of anthracite coal formations.

HEALTH AND SAFETY

Federal Metal and Nonmetallic Mine
Safety Act (30 U.S.C. 721-740)

This act directs the Secretary of the Interior (1) to develop, promulgate, and enforce health and safety standards for the protection of life and the prevention of accidents in metal and nonmetallic mines; (2) to make inspections or investigations; and (3) to develop programs for the education and training of employers and employees in the recognition, avoidance and prevention of accidents and unsafe or unhealthy working conditions.

Federal Coal Mine Health and Safety
Act of 1969 (30 U.S.C. 801-960)

This act directs the Secretary of the Interior to (1) enforce mandatory health and safety standards for the protection of life and the prevention of injuries in coal mines and to develop improved safety standards; (2) inspect and investigate coal mines; (3) expand programs for the

education and training of operators, their agents, and miners in the recognition and avoidance of accidents or of unsafe or unhealthy working conditions in coal mines. The act authorizes the enforcement of coal mine health and safety laws.

PUBLIC AND ACQUIRED LANDS

General Mining Law, as amended (30 U.S.C. 22-24, 26-30, 33-35, 37, 39-42, 47)

This law authorizes the location of mining claims on the public domain for minerals which have not been made subject to the Mineral Leasing Act, as amended, and supplemented, or to the Materials Act. Patents for mining claims may be issued.

Mineral Leasing Act of February 25, 1920, as amended (30 U.S.C. 181-184, 185-193, 201-214, 223-229, 241, 251, 261-263)

This act authorizes the Secretary to issue leases and prospecting permits for coal, phosphate, oil, oil shale, gas, sodium, native asphalt, and solid and semisolid bitumen--bituminous rock including oil-impregnated sands from which oil may be recovered only after special treatment. This act has been supplemented by:

--Sulphur Production Act of April 17, 1926, (30 U.S.C. 271-276)

This act authorizes the Secretary to grant prospecting permits and leases for sulphur on public lands in New Mexico and Louisiana, subject to the general provisions of the Mineral Leasing Act.

--Potash Mining Act of February 7, 1927, as amended (30 U.S.C. 281-287)

This act authorizes the Secretary to issue leases and prospecting permits for chlorides, sulphates, carbonates, borates, silicates, or nitrates of potassium, subject to the general provisions of the Mineral Leasing Act.

Mineral Leasing Act for Acquired Lands
of August 7, 1947, (30 U.S.C. 351-359)

This act authorizes leasing by the Secretary of the Interior of specified mineral deposits on acquired lands, except lands within cities or national parks or monuments, lands acquired for development of mineral deposits, tidelands, submerged lands, and the continental shelf, and lands set apart for military or naval purposes. Incorporates by reference many provisions of the Mineral Leasing Act.

Materials Act of July 13, 1947,
as amended (30 U.S.C. 601-604)

This act authorizes the Secretary of the Interior to dispose of specified mineral and vegetable materials on public lands, where such removal is for use other than commercial or industrial purposes, or resale.

Entry of Building Stone Lands Act of
August 4, 1892, (30 U.S.C. 161)

Entry of lands valuable for building stone, under provisions applicable to placer mineral claims, is authorized under this act.

Collective Prospecting on Coal Lands
Act of August 31, 1964, (30 U.S.C. 201-1)

Collective prospecting, development, or operation of coal areas may be authorized by the Secretary of the Interior, in the interest of conserving the natural resources of any coal field or prospective coal area.

Valuable Source Material in Coal Lands
Act of August 11, 1955, (30 U.S.C. 541-541i)

Public lands classified or known to be valuable for coal subject to disposition are also to be opened to location and entry under the mining laws on discovery of valuable source material (e.g. uranium, thorium) occurring within any seam, bed of deposit of lignite.

Multiple Surface Use Act of July 23,
1955, (30 U.S.C. 611-615)

The act (1) amends the mining laws by listing "common varieties" not deemed to be valuable minerals of the type

which would validate mining claims, (2) provides for multiple use by the United States, its permittees and licensees, of the surface of a tract of the public lands subject to unpatented mining claims at the same time, and (3) restricts surface use by claimants.

Development of Mineral Resources Act
of June 30, 1950, (16 U.S.C. 508b)

Subject to consent of the Secretary of Agriculture, the Secretary of the Interior may permit prospecting, development, and utilization of mineral resources on public lands within the exterior boundaries of national forests in Minnesota and not presently subject to development or utilization under mining laws or mineral leasing laws.

Multiple Mineral Development Act of
August 13, 1954, as amended (30 U.S.C.
521-531)

This act provides for multiple mineral development of the same tracts of public lands. The same tract of land may be subject to rights under both the mining law and the mineral leasing laws. Parties seeking certain rights under this statute must file statements with the Secretary.

Lease of Oil and Gas Deposits Under
Rights-of Way Act of May 21, 1930
(30 U.S.C. 301-306)

The Secretary may grant leases of oil and gas deposits under railroad and other rights-of-way, the award of such leases contingent on certain conditions precedent and subject to preferential rights of owners of lessees of adjoining lands.

Disposal of Reserved Minerals Deposits Act
of July 17, 1914, as amended (30 U.S.C. 122)

Reserved mineral deposits which, at the time of application for patent, are subject to rights acquired by discovery and location under the mining laws made prior to the Mineral Leasing Act are subject to disposal to the holders of these rights.

Wilderness Act of September 3,
1964, (16 U.S.C. 1133)

Section 4 of this act provides that, under a program developed by the Secretary of the Interior in consultation with the Secretary of Agriculture, national forest wilderness areas shall be surveyed by the Geological Survey and the Bureau of Mines to determine the mineral value that may be present.

Mining Activities in National Parks and Monuments

The following statutes authorize mining activities in national parks and monuments under general regulations prescribed by the Secretary of the Interior:

- (1) Mt. McKinley National Park (16 U.S.C. 350a)
- (2) Death Valley National Monument (16 U.S.C. 447)
- (3) Coronado National Memorial (16 U.S.C. 450y-2)
- (4) Organ Pipe Cactus National Monument (16 U.S.C. 450z)

Reclamation Act of June 17, 1902,
as amended (43 U.S.C. 416)

Section 3 of this act authorizes the Secretary to withdraw from entry any public lands required for projected irrigation works contemplated under certain sections of the act, and also authorizes the Secretary to withdraw except under the homestead laws, and by implication the mining laws, any public lands believed to be susceptible of irrigation from said works.

Act of April 23, 1932 (43 U.S.C. 154)

This act permits the Secretary to open to location and entry under the general mining laws, subject to appropriate conditions, mineral lands withdrawn under the Federal reclamation laws for possible construction.

Act of August 4, 1939, as amended (43 U.S.C. 485h)

Section 9 of this act authorizes the Secretary to enter into contracts to supply water from reclamation projects for municipal and industrial purposes.

OUTER CONTINENTAL SHELFOuter Continental Shelf Lands Act
of August 7, 1953, (43 U.S.C 1331-1343)

The Secretary of the Interior is charged with administering the provisions of this act relating to the issuance of mineral leases for the Outer Continental Shelf and is authorized to grant rights-of-way for pipelines.

GEOHERMAL STEAM AND ASSOCIATED RESOURCESGeothermal Steam Act of December 24, 1970,
(30 U.S.C. 1001-1025)

This act authorizes the Secretary of the Interior to issue leases for the development and utilization of geothermal steam and associated resources in (1) lands administered by him, including public, withdrawn, and acquired lands; (2) national forests lands administered by the Forest Service, Department of Agriculture; and (3) lands conveyed by the United States with a reservation to the United States of geothermal steam and associated geothermal resources. Under the provisions of the act, minerals found in solution or in association with geothermal steam (except oil, hydrocarbon gas and helium) are defined as byproducts and are subject to a royalty payment to the United States, provided they have a value of less than 75 percent of the geothermal steam and are not of sufficient value to warrant extraction and production by themselves because of quantity, quality, or technical difficulties in extraction and production.

U.S. GOVERNMENT AND INTERNATIONAL AGENCIESINVOLVED WITH MINERALS(List Furnished by the Bureau of Mines)

Executive Office of The President

- National Security Council
 - Central Intelligence Agency
- Domestic Council
- Office of Management and Budget
- Council on Economic Policy
- Council of Economic Advisers
- Council on Environmental Quality
- Council on International Economic Policy
- East-West Trade Policy Committee
- Office of the Special Representative for Trade Negotiations
- Committee on Energy

Executive Departments

- Department of Agriculture
 - Commodity Credit Corporation
 - Export Marketing Service
 - Forest Service
 - Soil Conservation Service
- Department of Defense
 - Defense Preparedness Agency
- Department of the Air Force
 - Asst. Secretary of the Air Force (Research and Development)
- Department of the Army
 - Corps of Engineers
 - Asst. Secretary of the Army (Research and Development)
- Department of the Navy
 - Asst. Secretary of the Navy (Research and Development)
 - Asst. Secretary of the Navy (Installations and Logistics)
 - Office of Naval Petroleum and Oil Shale Reserves
- Department of Commerce
 - Asst. Secretary for Maritime Affairs
 - Maritime Administration
 - Asst. Secretary for Economic Development
 - Asst. Secretary for Science and Technology
 - National Bureau of Standards
 - Asst. Secretary for Economic Affairs
 - Social and Economic Statistics Administration
 - Bureau of the Census

APPENDIX II

APPENDIX II

Asst. Secretary for Domestic and International Business
Domestic and International Business Administration
Bureau of Resources and Trade Assistance
Bureau of International Commerce
Bureau of Domestic Commerce
Bureau of Economic Policy and Research
Office of Foreign Direct Investments
Federal Cochairmen of Regional Commissions
National Oceanic and Atmospheric Administration
Department of Health, Education, and Welfare
National Institutes of Health
Department of Housing and Urban Development
Federal Disaster Assistance Administrator
Department of the Interior
Secretary of the Interior
Under Secretary
Solicitor
Asst. Secretary--Congressional and Legislative Affairs
Asst. Secretary--Energy and Minerals
Office of Minerals Policy Development
Office of Research and Development
Geological Survey
Office of Minerals Exploration
Bureau of Mines
Mining Enforcement and Safety Administration
Bonneville Power Administration
Southeastern Power Administration
Southwestern Power Administration
Alaska Power Administration
Asst. Secretary--Land and Water Resources
Bureau of Reclamation
Bureau of Land Management
Office of Water Resources Research
Office of Land Use and Water Planning
Asst. Secretary--Fish and Wildlife and Parks
Bureau of Sport Fisheries and Wildlife
National Park Service
Bureau of Outdoor Recreation
Asst. Secretary--Management
Office of International Activities
Asst. Secretary--Program Development and Budget
Commissioner of Indian Affairs
Bureau of Indian Affairs
Department of Justice
Land and Natural Resources Division
Antitrust Division
Tax Division
Department of Labor
Asst. Secretary for Occupational Safety and Health

Occupational Safety and Health Administration
Office of the Deputy Under Secretary for International
Labor Affairs
Commissioner of Labor Statistics
Department of State
Under Secretary for Political Affairs
Under Secretary for Economic Affairs
Agency for International Development
Department of Transportation
Asst. Secretary for Policy, Plans, and International
Affairs
Asst. Secretary for Environment, Safety, and Consumer
Affairs
United States Coast Guard
Federal Railroad Administration
Saint Lawrence Seaway Development Corporation
Department of the Treasury
Asst. Secretary (Tax Policy)
Internal Revenue Service
Asst. Secretary (Enforcement, Operations, and Tariff
Affairs)
Bureau of Customs
Bureau of the Mint
Asst. Secretary (International Affairs)
Asst. Secretary (Economic Policy)
Asst. Secretary (Trade, Energy, and Financial Resources
Coordination)

Independent Agencies and others
Appalachian Regional Commission
Board of Governors of the Federal Reserve System
Commission on the Organization of the Government for the
Conduct of Foreign Policy
Delaware River Basin Commission
Energy Research and Development Administration
Environmental Protection Agency
Export-Import Bank of the United States
Federal Maritime Commission
Federal Mediation and Conciliation Service
Federal Power Commission
Federal Trade Commission
Foreign-Trade Zones Board
General Services Administration
Special Asst. to the Administrator for Stockpile
Disposal
Office of Preparedness
Interstate Commerce Commission
Interstate Commission on the Potomac River Basin
National Academy of Engineering

National Research Council
 National Academy of Sciences
 National Aeronautics and Space Administration
 National Commission on Productivity
 National Commission on Supplies and Shortages
 National Commission on Water Quality
 National Science Foundation
 National Transportation Safety Board
 Occupation, Safety, and Health Review Commission
 Overseas Private Investment Corporation
 Panama Canal Company
 Securities and Exchange Commission
 Tariff Commission
 Tennessee Valley Authority
 Water Resources Council
 Federal Energy Administration
 Asst. Administrator for Management and Administration
 Asst. Administrator for Regulatory Programs
 Asst. Administrator for Energy Resource Development
 Asst. Administrator for Policy and Analysis
 Asst. Administrator for International Energy Affairs

International Organizatons in which the United States
participates

United Nations
 Special Programs
 Economic and Social Council
 Education, Scientific, and Cultural Organization
 Conference on Trade and Development
 International Lead and Zinc Study Group
 International Atomic Energy Agency
 International Bank for Reconstruction and Development
 International Development Association
 International Finance Corporation
 International Monetary Fund
 Organization of American States
 Inter-American Development Bank
 Asian Development Bank
 Colombo Plan Council for Technical Cooperation in South
 and Southeast Asia
 Customs Cooperation Council
 General Agreement on Tariffs and Trade
 International Council of Scientific Unions
 International Union of Crystallography
 International Union of Geodesy and Geophysics
 International Geographical Union
 International Union of Geological Sciences
 Organization for Economic Cooperation and Development
 South Pacific Commission

RECOMMENDATION BY THE NATIONAL COMMISSION
ON MATERIALS POLICY AND RESPONSE BY THE
OFFICE OF MANAGEMENT AND BUDGET

"Recommendation 1.4 . . . traditional U.S. economic policy be maintained by relying upon market forces as a prime determinant of the mix of imports and domestic production subject to considerations of public policy involving the national security, health and viability of domestic materials industries, and fair competition. Where costly and dangerous reliance upon imported materials appears to be the outcome of existing trends, the Government must intervene."

RESPONSE TO RECOMMENDATION

The Mining and Minerals Policy Act of 1970 directs the Secretary of the Interior to report annually on the state of the domestic mining; minerals and mineral reclamation industries. Recommendations for legislative programs as may be necessary to implement the policy of the Mining and Minerals Policy Act are also required. The Secretary of the Interior is responsible for coordinating Mineral Policy under this law and consults with other government agencies, industry, environmentalists, consumers, and academia as required. Our recent experiences with the energy crisis have made us more cognizant of the need to fully assess our minerals posture. The Administration conducted a multi-agency critical materials study to investigate U.S. concerns about the availability of an adequate supply of critical imported materials at reasonable cost. The Interior Department supplied substantial amounts of data for the critical materials study. In furtherance of these concerns, the Secretary of the Interior on September 5, 1974, announced a new minerals analysis and policy system (MAPS)--a program to improve governmental decision making in mineral-related matters. One of the principal segments of the program is the intensification of analysis of critical imported minerals to identify potential problems, and to assess potential impacts on the U.S. economy if supplies shrink or prices climb. Based on these

analyses MAPS will explore the options required to solve potential problems. These options include combinations of domestic exploration and production, recycling, stockpiling, and importation from sources considered reliable. The Defense Production Act was extended to June 30, 1974, and established a National Commission on Supplies and Shortages. On October 8, 1974, in his Economic Message, the President ordered the reorganization of the Nation's energy effort and the creation of an organization charged with developing a single national energy policy and program. On October 11, 1974, the President signed the Energy Reorganization Act of 1974, which establishes three new Federal offices; one of which is the Energy Resources Council which has the responsibility of developing a single national energy policy and program.



United States Department of the Interior

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Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

We appreciate the opportunity to comment on the revised draft report on the "Need to Develop a National Nonfuel Mineral Policy."

We note that the revised draft report gives effect to most of the comments which were provided to members of your staff as a result of a meeting held on January 14, 1975. And although we generally agree with the report recommendations, we have the following comments.

Page 31: We agree with the recommendation but feel that the Secretary of the Interior is already complying with it to some degree. Our earlier answer to the GAO question on page 8 of this report indicates this compliance. Agency programs resulting from specific laws would also be included in these existing efforts. We must admit, however, that as in all efforts limited by budget and personnel, expansion of the effort could be achieved if additional people and dollars were available. The priorities and benefits of such expansions must be considered in the context of other legal responsibilities.

Page 36, paragraph 3: Present policy is to monitor individual commodities, prepare for necessary action to counter or pre-empt specific conditions and then to take appropriate action when and if the specific condition occurs. The importance of pre-planned reaction (contingency planning to some) must be considered in at least three ways: 1) pre-planned reactions tend to reduce the likelihood that the undesired specific condition will occur, 2) pre-planned reactions can also reduce the severity of an undesired specific condition, and 3) some fuzziness in details of implementation introduces uncertainties for the foreign suppliers who might consider taking action leading to a supply disruption.



Page 40, last paragraph: Such trends as indicated here are considered in the problem of mineral policy development, but again the simplification of a complex situation can mislead. For example, the trend of increasing mineral demand also suggests that people throughout the world including the U.S. are raising their standard of living. The U.S. has supported such moves in the past. Secondly, increased competition also suggests that the competitive market place is regaining strength. The U.S. has supported such competition in the past. Thirdly, the trend that mineral costs will go up also suggests that profits will go up and thus the extractors of energy and minerals would be financially better able to meet future conditions even though consumers might be paying more for the product. And lastly, the trend that minerals will be harder to find as the high grade ores become depleted fails to recognize the capacity of the human race to find and use low grade deposits. Many examples of this point can be cited.

Page 41, paragraph 2: This basically is the question of interpreting how much government involvement (the means to an end) should be conducted to accomplish the objectives of the Mining and Mineral Policy Act of 1970.

Page 41, last paragraph: This section overlooks the role of the Strategic Stockpile under Public Law 520 of the 79th Congress.

Page 42: We concur with the recommendation but again suggest that the Secretary of the Interior has been doing this. There appears to be a basic difference of views as to how far to specify the details of a "clear" national nonfuel mineral policy particularly regarding the "permissible level of imports."

Also, we observe that this report suggests that the national policy should focus on the reduction of imports. In another report, "U.S. Dependence on Imports of Five Critical Minerals: Implications and Policy Alternatives", GAO recognized that domestic production is not always an attractive alternative to imports and suggests that the United States, when practical, should continue to adhere to the policy of lowest cost acquisition. Other considerations would include energy and environmental cost barriers and the need for large capital investments. It appears to us that the draft report does not sufficiently recognize the results of this earlier GAO report.

Sincerely,



Assistant Secretary - Management

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GAO Note: Page references in this appendix may not correspond to page numbers in the final report.

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