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# REPORT TO THE CONGRESS

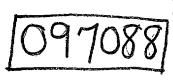


Stockpile Objectives Of Strategic And Critical Materials Should Be Reconsidered Because Of Shortages

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

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

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

This is our report on the procedures for computing objectives for and the management of the strategic and critical materials stockpile by the General Services Administration.

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).

Copies of this report are being sent to the Secretary of Defense, the National Security Council, and the Administrator of General Services.

Comptroller General of the United States

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## **ABBREVIATIONS**

GSA	General Services Administration
IMAC	Interdepartmental Materials Advisory Council
NCMP	National Commission of Material Policy
OEP	Office of Emergency Preparedness
OMB	Office of Management and Budget
OP	Office of Preparedness
SCM	strategic and critical materials

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

STOCKPILE OBJECTIVES OF STRATEGIC AND CRITICAL MATERIALS SHOULD BE RECONSIDERED BECAUSE OF SHORTAGES

#### DIGESI

#### WHY THE REVIEW WAS MADE

The strategic and critical materials stockpile objectives were reduced on April 16, 1973, by a quantity valued at more than \$4 billion, leaving stockpile objectives valued at \$700 million.

The purpose of stockpiles is to accumulate materials for a national emergency. Because of the large reduction in strategic stockpile objectives, with no readily apparent changes in the military security situation, GAO reviewed the procedure for computing needs and managing the national stockpile.

#### FINDINGS AND CONCLUSIONS

Assumptions on which stockpile objectives have been based since February 1973 are more optimistic now that at any time since passage in 1946 of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98 et seq.). Changes in assumptions and estimated resulting changes in objectives are as follows:

	Value of reduction
	(billions)
Period of reliance on the national stock- pile as a source of supply reduced from 3 years to 1 year	\$1.5
Import estimates re- vised to allow normal imports from foreign countries, except communist and comba-	
tant countries	•5
First-year import hedge eliminated	1.2
Increased civilian austerity, substitu-tion, and other	.9
Total	\$ <u>4.1</u>

This reduction in objectives meant that materials in the stockpile valued at \$4.1 billion became excess to projected needs. As a result of acts of Congress approved by the President, the General Services
Administration (GSA) was given approval to dispose of \$726 million of excess opium, copper, aluminum, silicon carbide, zinc, and molybdenum. (See pp. 4 and 5.)

Estimates of stockpile supplies are based on readily available capacity and known resources in the United States and other countries as directed by the National Security Council. We could not obtain definitive explanations as to how and why the more optimistic assumptions came to be, other than the National Security Council directed them.

Department of the Interior figures show that the United States depends on imports for more than half its supply of six selected basic raw materials (bauxite, chromium, manganese, tin, tungsten, and zinc).

The National Commission on Materials Policy's interim report shows demand for these materials is increasing. A small number of countries supply these materials, which may be susceptible to restricted imports due to producers' boycotts.

Although these materials are in the national stockpile, the quantity objectives for them were either eliminated or drastically reduced under the 1973 change in assumptions. (See pp. 7 and 8.)

The United States had no problem importing needed resources in the past, but the present economic outlook holds some problems. Continued growth in per capita consumption by industrialized countries as well as an even greater growth in comsumption by developing countries will greatly increase world demand for resources, some of which are nonrenewable. (See p. 7.)

Producer restrictions and boycotts could also limit U.S. imports, especially those which are supplied worldwide by only a few countries.

An official of the National Security Council said the Office of Manage-ment and Budget (OMB) was studying the imported commodities we depend on and the likelihood of foreign suppliers creating artificial shortages. (See p. 8.)

The executive branch has no centralized, continuing system for providing or coordinating information needed for broad policymaking on future resource supply and demand situations.

Because of today's increasing competition for scarce commodities and the possibility of producer restrictions on supply, long-range requirements planning is necessary. Releasing material from the strategic stockpile as a short-term method of neutralizing the effects of economic crises, provided that the stockpile is replenished to meet its intended purpose, should be considered in such planning.

Long-range planning is particularly important, since a goal of reducing the United States import dependence is inconsistent with the recent disposals of stockpiled materials. (See pp. 15 and 16.)

#### RECOMMENDATIONS OR SUGGESTIONS

GAO recommends that the Secretary of Defense and the National Security Council reevaluate the current stockpile assumptions to assure that adequate materials are stockpiled to meet the nation's readiness needs. GAO also recommends that the Administrator of General Services use this data, as well as data from other studies now in process, to arrive at

new national stockpile objectives.

## AGENCY ACTIONS AND UNRESOLVED ISSUES

GSA said the April 1973 review of the stockpile was the first total stockpile review ever conducted and techniques employed in that review are superior to prior procedures.

OMB disagreed with GAO's statement that the stockpile assumptions are narrow and highly subjective. It said that, in areas other than the length of time used for planning purposes, the new assumptions are the same or less narrow than the old.

OMB also said current assumptions are quite defensible and pointed out that the executive branch is reviewing implications of potential producer actions on strategic as well as economic policies.

GAO concludes, nevertheless, that the current resources outlook--i.e., domestic demand, competition for resources, and potential for cartelization--indicates a reevaluation of stockpile objectives is warranted. (See pp. 7 to 12.)

GSA said that history militates against lesser developed countries withholding their supply of natural resources and that every country which has become developed has done so as a consequence of developing its natural resources. GSA officials said there is no evidence that leaders of such countries are anything but ambitious for development.

OMB does not agree that being import-dependent on a small number of countries for certain commodities makes the United States susceptible to restricted imports due to producer boycotts. OMB believes the political, geographic, economic, and

cultural diversity of the producer countries is every bit as important as the number of countries from which the United States imports.

OMB pointed out that the executive branch is completing an interagency study of imported nonfuel raw materials. Preliminary results indicate that—in terms of prospects for price gouging and cartel—like action, risks of supply inter—ruption, and the impact of any prospective action on the U.S. economy and national security—there is significant vulnerability for only a small number of raw materials.

GAO still believes there is a possibility of restricted imports due to producer actions. The current situation has created an environment in which economic development in lesser developed countries can be hastened by the threat or actual use of boycotts or cartel activity. This is supported by the recent actions of the Organization of Arab Petroleum Exporting Countries and by suppliers of bauxite. (See p. 8.)

The Department of Defense and OMB agreed with GAO observations that long-range planning is necessary because of market disruptions and that a better system for providing and coordinating information is needed. GSA disagreed with GAO observations, saying the executive branch has the capabilities to predict future demand and supply.

GAO is convinced that better and more effective coordination of supply and requirements estimates is essential to establishing sound stockpile policy. (See p. 15.)

The Department of Commerce said that, while the idea of an economic stockpile does warrant exploration, the criteria and management techniques for an economic stockpile would be substantially different from the strategic stockpile and that joint consideration of the two is inappropriate.

GSA and OMB commented that a strong line of demarcation must be drawn between a strategic and critical materials stockpile and an economic stockpile. They said there is no statutory authority for the economic stockpiles.

GAO agrees that the approaches are substantially different and has suggested that, if the Congress finds it desirable to broaden the stockpile concept to permit use of national stockpile materials for other than national defense to meet short-term economic emergencies, new legislation will be required.

GSA said that materials have been sold under long-term contracts, some of which extend as long as 8 years; therefore, it would not be feasible to stop these contractual arrangements.

GAO agrees with GSA's observation-its recommendation was directed to future sales. (See p. 17.)

OMB argued that, because there is significant potential vulnerability for only a small number of raw materials, stockpile disposals should not be halted. Despite OMB's disagreement, the United States relies heavily on imports for some of the material recently authorized for disposal. GAO maintains that

stockpile disposals should be halted until it is determined exactly which raw materials are potentially vulnerable to price gouging, cartelization, and supply interruption.

# MATTERS FOR CONSIDERATION BY THE CONGRESS

A goal of reducing the United States import dependence for certain materials, which in GAO's view is strongly indicated by the unfavorable world resources outlook, conflicts with the policy of declaring excess materials and disposing of materials from the stockpile.

The executive branch used highly subjective assumptions to arrive at levels essential to the national security in a defense emergency.

GAO suggests that, until the Nation's critical resource requirements are clarified, the Congress may wish to consider halting future disposals currently authorized under specific legislation and grant no further requests to dispose of strategic and critical materials.

The Congress may also want to study the advisability of broadening the strategic and critical materials stockpile concept to release material to meet short-term economic as well as national defense emergencies. Any materials released for economic purposes should be replenished so that all national defense requirements are met. If the Congress finds that such action is desirable, new legislation will be required.

#### CHAPTER 1

#### INTRODUCTION

GAO has reviewed recent changes in the stockpile of strategic and critical materials (SCM). These include changes in stockpile responsibility and changes in the assumptions for determining quantity objectives to be included in the SCM stockpile. SCM stockpile objectives are worth \$700 million, compared with previous objectives valued at \$4.8 billion.

"Strategic and critical materials" can be defined as those materials which would be essential to the national security in a defense emergency and which may not be readily available in such an emergency. "Strategic" refers to the relative availability of a material, while "critical" refers to its essentiality. Essential needs include defense support needs and U.S. civilian needs in a national emergency. To meet these needs, the SCM stockpile includes:

- --Agricultural commodities such as rubber and vegetable tannins.
- --Metals, such as aluminum, antimony, cobalt, lead, magnesium, tin, and zinc.
- --Minerals and ores, such as asbestos, bauxite, chromium, diamonds, mercury, mica, titanium, tungsten, and iodine.

#### LEGISLATION

Several laws deal with the stockpile concept. The first of these was the Act of June 7, 1939, ch. 190, 53 Stat. 811 (50 U.S.C. 98 et seq. (Supp. V, 1939)), which gave the military departments authority to determine the quality and quantity of materials to be acquired. Under this act, \$70 million worth of chromite, quartz crystal, rubber, and tin were purchased.

During World War II, raw material consumption bore heavily on the SCM stockpile and the Nation's resources. The Congress therefore included section 22 in the Surplus Property Act of 1944 (50 U.S.C. App. 1631 (Supp. V, 1946)) to place surplus Government-owned minerals in the stockpile after the war.

In 1946, the Act of June 7, 1939, was amended and designated the "Strategic and Critical Materials Stock Piling

Act" (50 U.S.C. 98 et seq.). The amended act provides for acquiring and retaining certain strategic and critical materials needed to supply U.S. industrial and military needs during a national emergency. The initial appropriation under the 1946 act was \$100 million.

The Government possesses accumulated strategic materials under two other acts. The Defense Production Act of 1950 (50 U.S.C. App. 2061 et seq.) was passed during the Korean conflict as an emergency measure to mobilize industry and to increase producton. This act authorized the Government to buy producers' expanding metals and minerals output as an incentive to defense-essential expansion of production capacity and actual output.

The Agricultural Trade Development and Assistance Act of 1954 (7 U.S.C. 1691 et seq.) created a third stockpile—the supplemental stockpile. The supplemental stockpile contained strategic and critical materials purchased with foreign currencies obtained from the sale of surplus food commodities.

Although the laws governing the acquisition, retention, and disposal of the various stockpiles differ, the materials in these stockpiles are credited toward the objectives established for the SCM stockpile--sometimes referred to as the national stockpile.

#### STOCKPILE POLICY CHANGES

Stockpile policy is the basis for determining the types, quality, and quantities of materials to be included in the SCM stockpile as well as the basis for guiding disposal of materials determined to be excess to national security requirements. In accordance with Executive Order 11725 (38 F.R. 17175, June 29, 1973), the General Services Administration (GSA) has been responsible for stockpile policy since July 1, 1973, when the Office of Emergency Preparedness (OEP) was abolished. Within GSA, the Office of Preparedness (OP) was established to carry out the national emergency preparedness functions and responsibilities, including stockpile policy. Although OP makes the major analysis in determining objectives, it relies on other agencies for basic information. The major advising agencies are the National Security Council and the Departments of Defense, the Interior, Commerce, and State.

Another procedural change in determining objectives was eliminating the Interdepartmental Materials Advisory Committee (IMAC) in April 1973. IMAC had task forces to review

all commodities in the SCM stockpile for both quality and quantity. These task forces consisted of commodity experts from OEP, GSA, and the Departments of Defense, Commerce, the Interior Agriculture, and State. On the basis of these task forces' reports, IMAC made recommendations to OEP to increase, decrease, or not change SCM stockpile objectives. These recommendations could be accepted, rejected or accepted with modifications. Agencies which made up IMAC currently provide OP with requested information.

#### SCOPE OF REVIEW

We examined laws, regulations, and policies; interviewed officials of GSA and the Departments of Agriculture, Commerce, Defense, and the Interior; and researched the current economic environment and a possible "mineral crisis."

We also obtained comments on our report from officials at the Departments of Commerce, Defense, and the Interior; GSA; and the Office of Management and Budget (OMB).

#### CHAPTER 2

#### STOCKPILE OBJECTIVES AND MATERIALS OUTLOOK

For each material in the SCM stockpile, OP calculates the difference between the estimated requirements to satisfy essential civilian and defense demand and the estimated available supply as directed by the National Security Council. If projected demand exceeds projected supply, a quantity objective is established for the difference. When assumptions used in making these projections change, quantity objectives change accordingly.

#### \*ASSUMPTIONS USED IN DETERMINING OBJECTIVES

Assumptions concerning a future national emergency have changed several times since the SCM stockpile was established, and the resulting objectives have changed also. These changes have been made in accordance with national policy. In February 1973, OEP conducted a study with guidance from the National Security Council. As a result of this study, in April 1973 quantity objectives for the SCM stockpile were reduced from \$4.8 billion to \$700 million. Changes in assumptions and the resulting reductions follow:

<u>Assumption</u>	Value of reduction
	(billions)
Period of reliance on the SCM stockpile as a source of supply reduced from 3 years to 1 year  Import estimates revised to allow normal imports from foreign countries, except communist and combatant countries  First-year import hedge eliminated  Increased civilian austerity, substitution, and other	\$1.5 .5 1.2 <u>.9</u>
Total	\$ <u>4.1</u>

We could not obtain definitive explanations as to how and why these more optimistic assumptions came to be other than the National Security Council directed them.

The reductions in objectives meant that materials in the stockpile with a total value of \$4.1 billion became excess to projected needs. To dispose of this excess, GSA must obtain approval from the Congress. The Congress has

approved disposing of \$726 million worth of excess opium, copper, aluminum, silicon carbide, zinc, and molybdenum.

## Reduced reliance on SCM stockpile as source of supply

Initial planning after World War II was based on the assumption that a conflict would last 5 years and would require 10 million men. These assumptions were changed in 1958, when the length of a conflict was reduced to 3 years and the force was reduced to 5 million men.

Although present assumptions regarding the length of a conflict and force requirements are similar to those of 1958, reliance on the SCM stockpile as a source of supply was revised in April 1973. The SCM stockpile is now to provide materials to meet strategic and critical needs during the first year, rather than 3 years, of a conflict. Under the revised assumption, after the first year materials resulting from increased civilian austerity and increased use of substitute materials are expected to meet defense production needs.

#### Revised import estimates

Before the assumptions changed in 1973, it was believed that imports would be obtained from North American and Caribbean countries during the entire 3 years of a conflict and that imports could be obtained from selected other countries for the second and third years of such a conflict. However, the projected quantities of these imports were reduced by possible reduced imports due to strikes or political instability in the exporting countries. In addition, the projected quantities were adjusted for possible shipping losses.

The 1973 assumptions changed the import projections by eliminating the adjustment factor for strikes and instability. Shipping losses are still considered.

# Eliminated discounting of foreign sources of supply during first year of a conflict

Previously it was assumed that supplies would be obtained from selected countries outside North America and Caribbean countries only during the second and third years of a conflict. It is now assumed that supplies would be obtained from these countries in all 3 years of a conflict, which would eliminate the first-year hedge.

#### Level of domestic austerity and substitution

For the first year of a conflict, the SCM stockpile-together with domestic production and assumed imports--is
intended to provide enough materials to support both national security and domestic needs without reducing overall
standards of living to below preconflict levels. If the
conflict were to extend beyond 1 year, domestic austerity
would be required to support critical defense needs. Under
the new assumptions, domestic austerity after the first year
would be increased.

Rates of substitution of noncritical materials for critical materials were identified for each major commodity which had a substitute. Substitution in the first year of a conflict was computed at one-half the maximum rate to allow for the time lag in the transition to substitute materials. Under the new assumptions, the use of substitutes has increased and has contributed to the overall reduction of SCM quantity objectives.

# FUTURE DIFFICULTY IN IMPORTING STRATEGIC AND CRITICAL MATERIALS

Since the assumptions were changed in April 1973, the resources outlook has changed and these changes could have an impact on the SCM stockpile. As we pointed out in our report to the Congress, "U.S. Actions Needed to Cope with Commodity Shortages" (B-114824, Apr. 29, 1974), the world has entered a period in which shortages of basic commodities are causing serious economic, social, and political problems for the United States and other countries. Along the same lines, the final report of the National Commission on Materials Policy (NCMP), issued is June 1973, stated that:

"Growing U.S. materials demands upon the rest of the world's supply occurs at a time when other nations' demands are rising at an even faster rate than our own."

In the past the United States has had little difficulty importing the minerals necessary to satisfy its demands. However, the current and future situation may change because of (1) increasing competition for scarce resources and (2) the possibility of actions to restrict supplies and/or increase prices.

#### <u>Increasing domestic demand and</u> <u>competition for resources</u>

The first interim report by NCMP stated that:

"The nation's vigorous industrial and economic growth over the past century has resulted in the highest standard of living in the world. Our complacency, however, has resulted in our failure to develop new material sources as fast as required by the economy. As a consequence, the United States is increasingly dependent upon foreign sources."

NCMP concluded that, on the basis of commodity summaries and projections, the gap between our requirements and our domestic supply was widening for most of our basic materials. NCMP projected that, if present trends continue, the gap for all minerals would increase from \$4 billion in 1970 to \$60 billion in 2000. Also, a previous director of the Bureau of Mines said that the U.S. mineral deficit could approach \$100 billion a year if trends continued.

Department of the Interior figures show that the United States depends on imports for more than half of its supply of six selected basic raw materials (bauxite, chromium, manganese, tin, tungsten, and zinc). An interim report of NCMP showed that the demand for these materials was increasing. The supply of each of these materials comes from a small number of countries, thus making these materials susceptible to restricted imports due to producers boycotts. Although these materials are in the SCM stockpile, the quantity objectives for them were either eliminated or drastically reduced under the 1973 change in assumptions.

Today our country is actively competing with the other industrial nations of the world for these limited resources. The combination of the industrialized countries' continued growth in per capita consumption of material and the increased growth in consumption by newly developed countries will greatly increase total world demand for resources. For example, according to NCMP, world mineral consumption during the past two decades has been growing at close to 5 percent a year--a rate that doubles consumption every 15 years.

The mineral situation compounds the problem of greatly increasing demand for resources. Since minerals are non-renewable resources which are in finite supply in the world, competition for them is increasing. One authority foresees

the day when some minerals will not be available at any price.

A National Security Council officials told us that the executive branch was making a study of the imported commodities we depend on and the likelihood of foreign suppliers creating artificial shortages.

The graphs on pages 9 to 12 show the past, present, and projected supply and demand of some of the United States most important minerals. 1

The line for industrial demand represents total demand, which includes demand for primary and secondary supplies. Primary demand shows the amount demanded from available raw materials, and secondary demand shows demand for what can be recovered from scrap and reused.

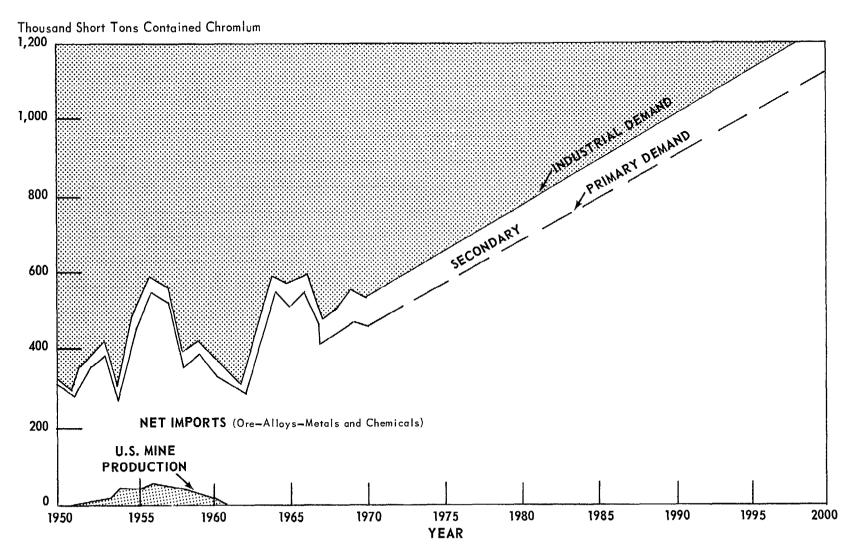
#### Possibility of producer restrictions on exports

In view of the United States' growing demand for and dependence on foreign sources of supply, the availability of foreign supplies takes on increasing importance. As pointed out in our previously mentioned report on commodity shortages, some of the variables which could affect foreign supplies are (1) foreign government attitudes and policies on U.S. foreign investment, (2) increased desire and ability of suppliers to conserve their resources, and (3) cartels and producer country alliances affecting price, volume, and direction of exports.

The latter variable deserves consideration in the U.S. resources outlook. Just recently the Organization of Arab Petroleum Exporting Countries limited exports of crude oil to the United States. Producer countries' tactic of banding together to control the supply of crude oil resources could be used for other resources—especially those which are supplied worldwide by only a few countries. For example, the nations which provide nearly 70 percent of U.S. bauxite imports recently increased prices by 470 percent and nations exporting tin, rubber, and copper have formed producer groups.

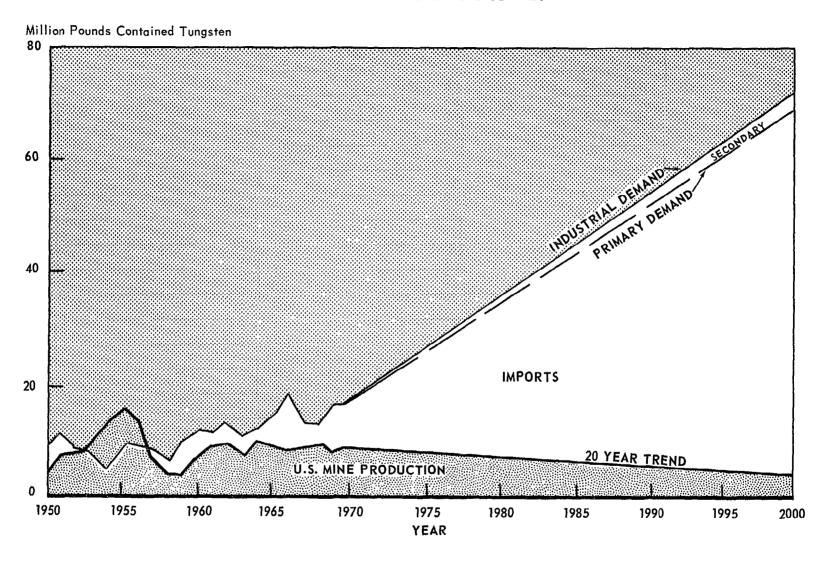
<sup>1&</sup>quot;Towards a National Materials Policy: Basic Data and Issues, An Interim Report," NCMP, April 1972.

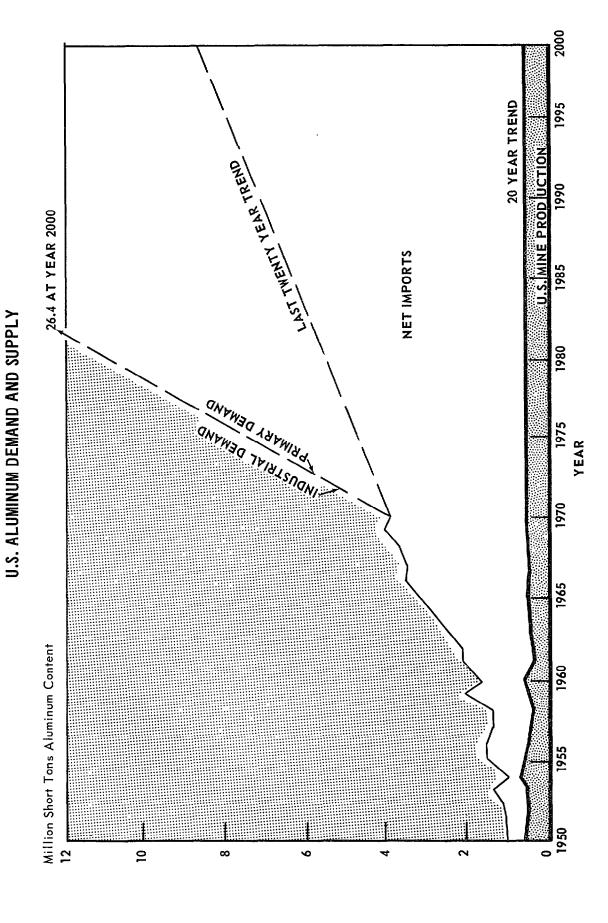
## U.S. CHROMIUM DEMAND AND SUPPLY



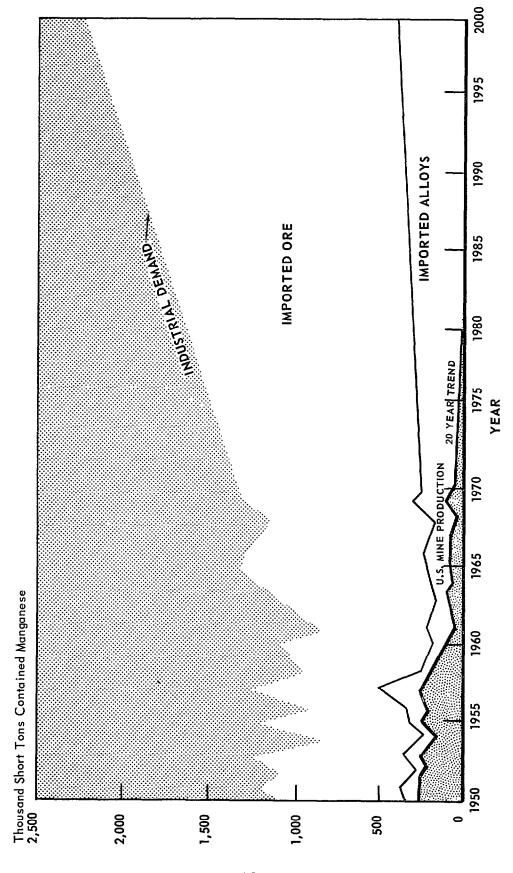
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# U.S. MANGANESE DEMAND AND SUPPLY



#### AGENCY COMMENTS

In commenting on our draft report (see app. VI), GSA stated that the report attaches great significance to the reduction in stockpile values that occurred when the present objectives were adopted in April 1973. GSA stated such reductions are significant only if one ascribes to the adequacy of the prior objectives. It pointed out that the prior objectives were reviewed infrequently and that the entire stockpile was never reviewed in total. GSA further pointed out that the current procedures for establishing objectives were developed after the Senate Committee on Armed Services recognized the inadequacy and recommended changes in the procedures to establish objectives. According to GSA, the 1973 objectives were established using much improved procedures.

In their comments on our draft report (see app. VIII), OMB disagreed with our statement that the stockpile assumptions are narrow and highly subjective. It said that, in areas other than the length of time used for planning purposes, the new assumptions are the same or less narrow than the old assumptions. OMB further stated that the current assumptions are quite defensible and pointed out that the executive branch interagency study is reviewing the implications of potential producer actions on strategic as well as economic policies.

We believe that the current world outlook for supplies of resources--i.e., domestic demand, competition for resources, and potential cartelization--indicates that a reevaluation of the stockpile assumptions is warranted.

GSA stated that history militates against lesser developed countries' withholding their supply of natural resources and that every country which has become developed has done so by developing its natural resources. GSA officials said that there is no evidence that the leaders of such countries are anything but ambitious for development.

OMB does not agree that being import-dependent on a small number of countries for certain commodities makes us susceptible to resticted imports due to producer boycotts. OMB believes that the political, geographic, economic, and cultural diversity of the producer countries is as significant a factor as the number of countries from which we import.

In short, OMB feels that GAO should look at more than just the number of supplier countries when making judgements about the United States' susceptibility to supply restrictions. It pointed out that the executive branch is completing an interagency study of imported nonfuel raw materials. Preliminary results of the study indicate that—in terms of prospects for price gouging and cartel-like action, risks of supply interruption, and the impact of any prospective action on the United States' economy and national security—there is potential vulnerability for only a small number of raw materials.

GAO believes that restriction of imports due to producer boycotts is a possibility in the current environment. The current demand situation has created an environment in which economic development in lesser developed countries can be hastened by the threat or actual use of boycotts or cartelization. This is supported by the recent actions of the Organization of Arab Petroleum Exporting Countries and the suppliers of bauxite.

A recent report by the Science Policy Research Division of the Congressional Research Service, Library of Congress, "Domestic Raw Materials Resources, Production, and Demand vis-a-vis Imports from Abroad," after recognizing the arguments against the possibility of boycotts, including those presented by OMB, concluded that

"\*\*\*in view of the increasing dependence of the United States upon many of these cartel-candidate materials, it is clear that the possibility of cartels cannot be dismissed out of hand."

#### CHAPTER 3

#### LONG-RANGE PLANNING FOR MATERIAL REQUIREMENTS

As pointed out in chapter 2, two major factors of the present and future world resources outlook could effect the stockpile. These are (1) increasing competition for scarce commodities and (2) the possibility of restricted imports due to producer actions. Because of these factors, the Nation's attention is beginning to focus on ways to avoid material shortages and related economic problems.

As our previous report stated, long-range planning is needed. Better and more effective coordination of supply and requirements estimates and better management of programs already authorized are also needed. The data bases for mineral resources and reserves, private research and development activities, and technological capabilities have many gaps. Because the responsible agencies have not fully developed their analytic resources, their ability to discern broad trends, to integrate data from various sources, and to project future developments is limited.

The executive branch does not have a centralized, continuing system to provide or coordinate the information needed for broad policymaking on future resource supply and demand situations. We therefore recommended in our previous report that one organization, designated by the Council on Economic Policy, coordinate agency analyses of long-range economic planning.

Until long-range requirements are fully developed, any assumptions used in determining stockpile objectives will be questionable.

# INCONSISTENCY BETWEEN STOCKPILE POLICIES AND SELF-SUFFICIENCY GOALS

During the recent oil embargo, the President announced a goal of national self-sufficiency in energy by 1980 by developing domestic energy sources and reducing energy use. Since the oil embargo, several authorities have suggested that a program with similar objectives be established for other resources. Some of the minerals for which the United States relies heavily on other countries are bauxite, chromium, cobalt, manganese, mercury, nickel, tin, tungsten, and zinc.

A program of short-term self-sufficiency for resources other than energy would have an impact on stockpile decisions. Provided that the stockpile is replenished to meet its intended purpose of supporting national defense

emergencies, stockpiled materials could be released and used as an alternative to imports as a source of supply and would reduce our import dependence. Although not a long-term source of supply, the stockpile could be a short-term method of neutralizing the effects of economic and/or political crises.

In the past the SCM stockpile has been used for national defense emergencies. During the Vietnam conflict some stockpile releases did occur. These releases, authorized by the President, included copper, nickel, and quinine. Most of these releases came either from the supplemental stockpile or SCM stockpile declared excesses.

Because of the increased demand for basic material and the possibility of producer restrictions, there has been increased recent dialogue on the need for a stockpile of raw materials for use as an economic buffer. For example, a Battelle Columbus Laboratories research report issued in April 1973 for the NCMP recommends that the:

"\*\*\* United States include provisions in its raw materials policy for an 'economic stockpile' to limit price extremes damaging to the long-term interests of producers and short-term interests of consumers of raw materials."

Both the items included and the quantity objectives should be reevaluated before seriously considering the possibility of using the SCM stockpile as an economic buffer.

#### CONCLUSION

As world demand for a finite supply of nonrenewable resources increases and as the possibilities of producer boycotts and other restrictions exist for some resources, the United States may no longer be able to assume that it can always import quantities of resources to satisfy its increasing demand. However, stockpile policy assumes that the United States can import from all countries except communist countries and those involved in a conflict. We believe this assumption conflicts with the world resources outlook.

Long-range planning is necessary due to our increasing demand for resources. Because the United States relies heavily on imports for some of the materials which recently were authorized to be disposed of, we question whether enough thought was given to the Nation's future supplies of these materials. If long-range planning had been in effect earlier, the disposals might never have been

authorized. Such planning is particularly important for materials which

- -- have no substitutes,
- -- are largely imported,
- --are in strong demand, and
- --are susceptible to producer boycotts and other restrictions.

#### RECOMMENDATIONS

In view of the current national resource outlook, we recommend that the Secretary of Defense and the National Security Council reevaluate the current stockpile assumptions to assure that adequate materials are stockpiled to meet the Nation's readiness needs.

We also recommend that the Administrator of General Services use this data, as well as data from other studies now in process, to arrive at new national stockpile objectives.

#### AGENCY COMMENTS

DOD and OMB agreed with our observations that long-range planning is necessary because of market disruptions and that a better system for providing and coordinating information is needed. GSA disagreed with our observation by stating that the executive branch has the capabilities to predict future demand and supply.

We believe better and more effective coordination of supply and requirements estimates is essential to establishing well-founded stockpile policy.

The Department of Commerce stated that, while the idea of an economic stockpile does warrant exploration, the criteria and management technique for an economic stockpile would be substantially different from those for the strategic stockpile and that joint consideration of the two is inappropriate.

GSA and OMB commented that a strong line of demarcation must be drawn between a strategic and critical materials stockpile and an economic stockpile. GSA said that existing statutory authority in this area is for common defense purposes only and that there is no statutory

authority for the economic stockpiles. GSA also said that the approaches to analysis of needs, acquisition, and disposal are substantially different for the two objectives.

We agree that the approaches are substantially different and, therefore, we have stated that, if the Congress decides to permit use of stockpiled materials under certain short-term economic emergencies, new legislation would be required.

GAO is currently conducting a detailed study of five commodities—aluminum, chromium, manganese, nickel, and tin—which will include developing the type of consider—ations needed to determine whether economic stockpiling is necessary. We plan further reporting on the results of that study. Economic stockpiling will also be investigated by the recently established National Commission on Supplies and Shortages.

GSA stated that many materials have been sold under long-term contracts, some of which extend for as much as eight years; therefore, it would not be feasible to stop these contractual arrangements.

GAO agrees--our recommendation was directed to future sales.

OMB disagreed with our recommendation that stockpile disposals be halted because, as stated on page 14, there is significant potential vulnerability for only a small number of raw materials. OMB stated that despite the above finding, the executive branch interagency study is reviewing the implications of potential producer actions on strategic as well as economic policies.

Despite OMB's disagreement, the United States relies heavily on imports for some of the materials recently authorized for disposal. GAO maintains that stockpile disposals should be halted until it is determined exactly which raw materials are potentially vulnerable to price gouging, cartelization, and supply interruption.

#### MATTERS FOR CONSIDERATION BY THE CONGRESS

A goal of reducing United States import dependence for certain materials, which in our view is strongly indicated by the unfavorable world resources outlook, conflicts with the policy of declaring excess materials and disposing of materials from the stockpile.

The present policy is based on the executive branch's highly subjective assumptions in arriving at levels essential to the national security in a defense emergency.

We suggest that, until the Nation's critical resource requirements are clarified, the Congress may wish to consider halting future disposals currently authorized under specific legislation and grant no further requests to dispose of strategic and critical materials.

The Congress may also want to study the advisability of broadening the strategic and critical materials stockpile concept to release material to meet short-term economic as well as national defense emergencies. Any materials released for economic purposes should be replenished so that all national defense requirements are met. If the Congress finds that such action would be desirable, new legislation will be required.

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#### CALCULATION OF STOCKPILE OBJECTIVES

In calculating stockpile objectives, OP relies on various Government agencies for necessary information. The major advising agencies and the information they provide follows.

- -- The Department of Defense provides information on direct military requirements for a national emergency.
- -- The Department of the Interior provides peacetime supply estimates for the metals, minerals, and ores in the stockpile.
- -- The Department of Commerce estimates peacetime consumption (demand) and provides supply information for some of the stockpile commodities.
- -- The Department of State provides economic and political guidance on the effect of stockpile decisions on foreign supply sources and users.
- -- The National Security Council provides the war scenario needed to project wartime requirements.

On the basis of this information and Government policy information, OP computerizes objectives using a mathematical model. The computer attempts to forecast material requirements for two levels of conflict and to assess the sufficiency of the national stockpile against domestic and military requirements. Several mathematical models estimate the gross national product contingent on either peacetime or some level of conflict and with appropriate Government expenditures and fiscal policies. OP then breaks down this estimate into detailed plans for the level of employment and personal and industrial consumption. The detailed plans are converted into statements of material requirements which are compared with supply estimates to determine stockpile objectives.

# Summary of Stockpile Objectives

<u>Commodity</u>	Objective as of June 30, 1972	as of
Aluminum: Short tons	450,000	-
Aluminum oxide, fused, crude: Short tons	249,095	_
Aluminum oxide, abrasive grain: Short tons	50,905	17,200
Antimony: Short tons	40,700	-
Asbestos amosite: Short tons	18,400	-
Asbestos chrysolite: Short tons	13,700	1,100
Bauxite, metal grade, Jamaica type: Long dry tons	5,000,000	4,638,000
Bauxite, metal grade, Surinam type: Long dry tons	5,300,000	-
Bauxite, refractory grade: Long calcined tons	173,000	_
Beryl ore:	15,215	_
Short tons Beryllium copper master alloy: Pounds	9,500,000	_
Beryllium metal:	150	88
Short tons Bismuth:		
Pounds	2,100,000	95,900
Cadmium: Pounds	6,000,000	4,446,500
Castor oil: Pounds	50,000,000	_
Chromite, chemical grade: Short tons	250,000	8,400
Chromite, metallurgical grade ore:	2,910,550	444,710
Short tons Chromite, refractory grade:	2,910,550	444,710
Short tons	368,000	54 <b>,</b> 000
Chromium, ferro, high carbon: Short tons	70,500	11,476
Chromium, ferro, low carbon: Short tons	-	-

<u>Commodity</u>	Objective as of June 30, <u>1972</u>	Objective as of June 30, 1973
Chromium, ferro, silicon: Short tons	-	-
Chromium, metal Short tons	3 <b>,</b> 775	_
Cobalt: Pounds	38,200,000	11,945,000
Columbium, concentrates: Pounds	<del>-</del>	-
Columbiunm carbide powder: Pounds	20,000	16,000
Columbium, ferro: Pounds	930,000	748,000
Columbium, metal: Pounds	45,000	36,000
Copper: Short tons	775,000	•••
Cardoge fibers, abaca: Pounds	25,000,000	_
Cordage fibers, sisal: Pounds	100,000,000	_
Diamond dies, small: Pieces	25,000	7,900
Diamond, industrial, crushing bort: Carat	23,700,000	_
Diamond, industrial, stones: Carat	20,000,000	-
Feathers and down: Pounds	3,000,000	1,938,000
Flurspar, acid grade: Short dry tons	540,000	-
Flurspar, metallurgical grade: Short dry tons	850,000	159,000
Graphite, natural, Ceylon amorphous lump: Short tons Graphite, natural, Malagasy	5,500	3,100
crystalline: Short tons	18,000	8,200

	Objective as of	Objective as of
Commodity	June 30, <u>1972</u>	June 30, <u>1973</u>
Graphite, naturalOther than		
Ceylon and Malagasy, crystalline: Short tons	2,800	-
Iodine: Pounds	8,000,000	-
Jewel bearings: Pieces Lead:	57,500,000	62,740,000
Short tons Manganese, battery grade, natural	530,000	65,100
ore: Short dry tons Manganese, battery grade, synthetic	135,000	10,700
dioxide: Short dry tons Manganese ore, chemical grade	1,900	-
type A: Short dry tons	35,000	12,800
Manganese ore, chemical grade, type B:		
Short dry tons	35,000	12,800
Manganese ore, metallurgical grade: Short dry tons	2,605,600	750,500
Manganese, ferro, high carbon: Short tons	600,000	200,000
Manganese, ferro, low carbon: Short tons	9,000	_
Manganese, ferro, medium carbon:	·	10 500
Short tons Manganese, matel, electrolytic:	36,000	10,500
Short tons Manganese, silicon:	9,000	4,750
Short tons	45,500	15,900
Mercury: Flask	126,500	42,700
<pre>Mica, muscovite block, strained   and better:</pre>		
Pounds Mica, muscovite film, 1st and	6,000,000	1,600,000
2d qualities: Pounds	2,000,000	413,000

<u>Commodity</u>	Objective as of June 30, 1972	Objective as of June 30, 1973
Mica, muscovite splittings: Pounds	19,000,000	2,200,000
Mica, phlogopite block: Pounds	150,000	51,000
Mica, phlogopite splittings: Pounds	950,000	200,000
Molybdenum: Pounds	<u>-</u>	
Nickel: Short tons	_	_
Opium:	143,000	
Average pounds Platinum group metals, iridium:	·	1,800
Troy ounces Platinum group metals, palladium:	17,000	·
Troy ounces Palatinum group metals, platinum:	1,300,000	328,500
Troy ounces Pyrethrum:	555,000	187,500
Pounds Quartz crystals:	63,375	-
Pounds Quinidine:	320,000	209,000
Ounces Quinine:	2,000,000	1,059,000
Ounces Rubber:	4,130,000	779,500
Long tons	200,000	-
Rutile: Short dry tons	100,000	-
Sapphire and ruby: Carats	18,000,000	-
Shellac: Pounds	1,000,000	-
Silicon carbide, crude: Short tons	30,000	-
Silver: Fine troy ounces	139,500,000	21,663,000
Sperm oil: Pounds	23,400,000	(removed from list 9-21-72)

<u>Commodity</u>	Objective as of June 30, 1972	Objective as of June 30,
Talc, steatite block and lump: Short tons	200	
Tantalum, minerals: Pounds	2,947,000	312,000
Tantalum, carbide powder: Pounds	26 <b>,</b> 750	2,900
Tantalum, metal: Pounds Thomium avida:	36,000	45,000
Thorium oxide: Short tons Tin:	40	-
Long tons Titanium:	232,000	40,500
Short tons	33,500	-
Tungsten, ores and concentrates: Pounds	55,655,000	4,234,000
Tungsten, carbide powder: Pounds	1,900,000	_
Tungsten, ferror: Pounds	· · ·	_
Tungsten, metal power, carbon reduced:		
Pounds	547,000	-
Tungstem, metal powder, hydrogen reduced:		
Pounds Vandium:	1,200,000	-
Short tons Vegetable tannin, extract, chestnut:	540	-
Long tons	9,500	4,400
Vegetable tannin, extract, quebracho:		
Long tons Vegetable tannin, extract, wattle:	50,600	-
Long tons Zinc:	9,500	-
Short tons	560,000	202,700



# UNITED STATES DEPARTMENT OF COMMERCE The Assistant Secretary for Administration Washington, D.C. 20230

September 13, 1974

Mr. J. K. Fasick Director International Division U.S. General Accounting Office Washington, D. C. 20548

Dear Mr. Fasick:

This is in reply to your letter of July 10, 1974, requesting comments on the draft report entitled "Stockpile of Strategic and Critical Materials."

We have reviewed the attached comments of the Assistant Secretary for Domestic and International Business and believe they are responsive to the matters discussed in the report.

Sincerely yours,

Henry B. Turner Assistant Secretary

for Administration

Attachment





# UNITED STATES DEPARTMENT OF COMMERCE The Assistant Secretary for Domestic and International Business Washington, D.C. 20230

AUG 2 6 1974

Mr. J. K. Fasick Director, International Division United States General Accounting Office Washington, D.C. 20548

Dear Mr. Fasick:

The Secretary of Commerce has asked me to reply to your letter of July 10, 1974, forwarding copies of a draft report to the Congress on the Stockpile of Strategic and Critical Materials. We appreciate the opportunity to review this report prior to its submission to the Congress.

The report not only refers to the strategic stockpile but also introduces a discussion of an economic stockpile. Recent interest which has been expressed by a number of parties in the idea of an economic stockpile does suggest an exploration of its potentialities and problems. We believe, however, that the criteria and management techniques for an economic stockpile would be substantially different from the strategic stockpile, and joint consideration of the two is inappropriate. Accordingly, all discussion of an economic stockpile should be eliminated from the report. The Department of Commerce will be pleased to assist in a study of the economic stockpile concept if this should be determined to be desirable.

The current review of stockpile objectives within the Executive Branch is the latest of many such reviews which have been a regular and continuing part of the management of the strategic stockpile. Information derived from recent armed conflicts as to material consumption rates and from the current worldwide materials supply problems may make this review particularly pertinent.

Sincerely,

Tilton H. Dobbin

Tilton H. Doll

Assistant Secretary for Domestic and International Business



## ASSISTANT SECRETARY OF DEFENSE WASHINGTON, D.C. 20301

2 9 AUG 1974

INSTALLATIONS AND LOGISTICS

Mr. F. J. ShaferDirector, Logistics and CommunicationsDivisionU.S. General Accounting OfficeWashington, D. C. 20548

Dear Mr. Shafer:

This is in response to your letter of July 10, 1974, to the Secretary of Defense which forwarded for information a draft report on your review of the stockpile of strategic and critical materials, Code 947084 (OSD Case #3873).

We agree with the report's observation that long-range material requirements planning is necessary because of the increasing potential of market disruptions by foreign suppliers. In this connection, we have recommended that strategic stockpile planning recognize this factor and take it into consideration in developing stockpile objectives.

Your report provides constructive comments which generally support Department of Defense desires for improvement in management of the national stockpile of strategic and critical materials. Your interest in this vital area of national defense is appreciated.

Sincerely,

Q. I. Mandolia

ARTHUR I. MENDOLIA
Assistant Secretary of Defense
(Installations & Logistics)



General Services Administration

Washington, D.C. 20405

AUG 22 1974

Honorable Elmer B. Staats Comptroller General of the United States General Accounting Office Washington, DC 20548

Dear Mr. Staats:

Thank you for the opportunity to review the draft report to the Congress on Stockpile of Strategic and Critical Materials.

A review of the basis for the computation of materials to be inventoried and the quantity thereof, as well as the management of the stockpile, is a complex subject. A strong line of demarcation must be drawn between a strategic and critical materials stockpile and an economic stockpile. Existing statutory authority in this area is for common defense purposes only. There is no statutory authority for economic stockpiles. The approach to analysis of needs, acquisition, and disposal are substantially different for the two objectives. It is our feeling that the draft report does not recognize these differences.

The report attaches great significance to the reduction in stockpile values that occurred when the present objectives were adopted in April 1973. Such reductions are significant only if one imputes to the prior objectives' efficacy. The institutional technique for the previous objectives was, as the draft report states, an Interagency Materials Advisory Committee. One of the consequences of this technique was long periods of time between material reviews. At no time was the entire stockpile reviewed in toto. Consequently, many materials had not been reviewed for four to ten years prior to the in toto review of April 1973. As far back as 1962, the Committee on Armed Services of the U.S. Senate recognized the inadequacy of this technique and recommended changes in the procedures to establish objectives. The techniques presently employed and those employed in the establishment of the 1973 objectives reflect what we believe to be much improved procedures.

The draft report is, in our opinion, unduly pessimistic. The tenor is that all materials required to drive an industrial economy are known and

Progress Through Excellence Service Through People quantified, that there is no longer any potential for technological developments, and that the Executive Branch is without capacity to predict future demand and supply. History militates against the first two tenets. History militates against a conclusion of withholding of supply by lesser developed countries possessing natural resources. Economic history indicates that every country which has moved from less developed to developed status has done so as a consequence of the development of natural resources. There exists no evidence that the leaders of such countries are anything but ambitious for development. With respect to the capacity of the Executive Branch to predict future demand and supply, I submit that we have such capabilities. The problem is what action the Government should take when imbalances are predicted and perceived. The unresolved question is the extent to which the United States Government should interdict the existing economic system. U. S. Government solutions to such imbalances suggest interdiction. The draft report does not address this question.

The draft report proposes that the sale of currently excess inventories in the Strategic and Critical Materials Stockpile be stopped. Material and commodity markets are complex. The Office of Stockpile Disposal, GSA, is an element of these complex marketplaces. If the proposal were adopted with respect to existing and previously contracted sales, substantial problems would occur. Many materials have been sold under long-term contracts, some of which extend over a period of as much as eight years. Included in this category are materials such as aluminum, lead, and zinc. Also included are ores and concentrates, such as manganese, chromite, and molybdenum. If the Government were to default on performance of such contracts, Members of Congress would be subjected to vehement protests from the affected parties. If the Office of Stockpile Disposal, GSA, were instructed to discontinue offerings of existing surpluses, there would again be market disruption. Careful coordination occurs between the Office of Stockpile Disposal, consumers, and other parties having an interest in such disposals. The maintenance of integrity is essential to a successful disposal operation. To discontinue offerings would jeopardize the existing integrity of this vital operation.

With respect to the proposal of the draft report that Congress, in its consideration of disposal legislation, take into account economic conditions, we make no comment. Enclosed is a detailed critique of the draft report.

Sincerely,

Assistant Administrator

Enclosure



### United States Department of the Interior

OFFICE OF THE SECRETARY WASHINGTON, D.C. 20240

AUG 2 7 1874

Mr. Henry Eschwege
Director, Resources and
Economic Development Division
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege:

We appreciate the opportunity provided to review your draft report on "Stockpile of Strategic and Critical Materials", (Code 947084, July 1974).

The Department of the Interior believes there is a need to address the question of strategies involving the use of economic stockpiles to cope with current and future mineral commodity actions. We have made some preliminary analyses on the subject of economic stockpiles and the question of public versus private ownership of the stocks; and plan to improve on these studies over the next few months. These studies and other analyses should uncover developing situations affecting either supply or demand. We will make our analyses and recommendations available promptly to the appropriate Government agencies. In this regard, more can be done to increase close and continuing consultation with the Bureau of Mines in formulating and executing all metal and mineral disposal plans. We will be discussing suggested improvements with GSA.

Our views on some of the details of the draft report were discussed with GAO officials and we understand that appropriate changes, based on those discussions, are being considered for the final report.

Sincerely,

Allan L. Keynolds

Director of Audit and Investigation

## EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, D.C. 20503

OCT 1 6 1974

Mr. Victor L. Lowe Director United States General Accounting Office Washington, D.C. 20548

Dear Mr. Lowe:

Thank you for the opportunity to comment on GAO draft report 947084 on the stockpile of strategic and critical materials.

Although the GAO report is titled "stockpile of strategic and critical materials", a good part of GAO's substantive conclusions relate to economic considerations. GAO's conclusions and observations are based on certain key assumptions which we feel are either inaccurate or misleading.

1. GAO cites a number of commodities for which we are import dependent on "a small number of countries" (aluminum, chromium, manganese, tin, tungsten, and zinc) and concludes that such dependence makes the U.S. susceptible to restricted imports due to producer boycotts. First, we do not agree that we are dependent on a small number of countries for all the commodities mentioned. For example, in the case of manganese, we import ore from seven countries—Brazil, Gabon, Zaire, South Africa, Australia, Mexico and Ghana. But more significantly we believe that the political, geographic, economic, and cultural diversity of the producer countries is every bit as important as the number of producers. Here the manganese example, with the wide diversity of its producers, presents a good contrast to the Arab oil embargo.

Another factor which is as important as the number of import sources is the nature of the social and political relationships we enjoy with a particular supplier nation. U.S. non-fuel materials import dependence is concentrated largely in developed countries, with Canada supplying half our needs. For both tungsten and zinc, Canada supplies more than 60% of our import requirements.

Another factor to consider when assessing the likelihood of producer induced supply restrictions is the importance of the particular commodity to the producer country and its ability to finance a supply restriction. For example, it is

unlikely that a less developed country such as Bolivia could finance a supply cut-off of tin, which accounts for about half of its export earnings.

In short, we feel that GAO should look at more than just the number of supplier countries when making judgements about U.S. susceptibility to supply restrictions.

- 2. GAO suggests that continued growth in per capita consumption by industrialized and developing countries will greatly increase demand for resources and thus create problems for the U.S. in importing needed resources. In some ways this reasoning is similar to Malthus' gloom forecasts of the 19th century which assumed that population would grow geometrically while means of subsistence would grow arithmetically. Both theories do not recognize the role of the market over the long term in stimulating substitution, secondary recovery, cost-saving technological developments, and discovery of new reserves. In this connection it is interesting to note some of our experiences of the last 30 or so years, including:
  - . the development and substitution of synthetics for natural rubber and diamonds;
  - technological developments requiring less tin in the manufacture of tin plate;
  - substitution of lower cost aluminum for tin in canning;
  - increased proven reserve estimates for almost all metals; and
  - increased secondary production of key metals such as copper, lead, and tin.
- 3. GAO describes an Administration goal of self-sufficiency by 1980 and states that this is inconsistent with stockpile disposals. This is not accurate. While recent events have generated a goal of self-sufficiency in the energy area, there is no generalized goal of self-sufficiency for other commodities. To extend self-sufficiency to all raw materials would be contrary to our efforts to encourage an open world trade system which benefits all. Moreover, it would make no economic sense for the United States or any other country to produce raw materials where productions costs are considerably higher than those of foreign suppliers. Occasionally it becomes necessary to increase domestic production because of national security reasons, as in the case of petroleum.

Regarding GAO's conclusions and recommendations, we agree with the observation that the Executive Branch needs a better system for providing and coordinating information needed for broad policy making on future resource supply and demand situations. The Executive Branch currently is reviewing alternatives for such a system. This matter also may be considered by the recently created National Commission on Supplies and Shortages. For the reasons outlined above in connection with GAO's key assumptions, we do not agree with GAO's pessimistic resource predictions nor its suggestion that all stockpile disposals be halted.

The Executive Branch is completing an interagency study of imported non-fuel raw materials. Preliminary results of the study indicate that in terms of (1) prospects for price gouging and cartel-like action; (2) risks of supply interruption; and (3) the impact of any prospective action on the U.S. economy and national security, there is significant potential vulnerability for only a small number of raw materials. The Administration is currently reviewing its alternatives for assuring adequate supplies of these commodities at reasonable prices.

With regard to our current stockpile policy, GAO has characterized Executive Branch assumptions as narrow and highly subjective. While the assumptions are, by nature, subjective, they are not narrow. Indeed, in areas other than the length of time used for planning purposes, the new assumptions are the same or less narrow than the old. Current planning involves a fairly straightforward supply-demand calculation. Available supplies with attrition at sea and loss of sources accounted for, are matched against estimated military and civilian consumption requirements for the first year in a conventional war scenario. If supply equals or is greater than demand, then the commodity is in balance and the objective is zero. If consumption requirements are greater than supply, the gap is filled by the stockpile objective. This stockpile objective gives the economy lead time to adjust to wartime conditions, so that supply and demand may reach equilibrium. The assumptions recognize that some civilian austerity may be necessary after the first year but defense needs are always covered. Furthermore, current stockpile law does not call for economic objectives to be merged with strategic considerations in setting stockpile inventory levels. On the strategic side, we feel that current assumptions are quite defensible. Even so, the Executive Branch interagency study is reviewing the implications of potential producer actions on strategic as well as economic policies.

#### APPENDIX VIII

I would like to thank you again for the opportunity to comment on the GAO report. Given the high level of public and Congressional sensitivity in this area, I would hope that GAO could perform additional detailed analysis before publishing some of the far reaching conclusions contained in the draft report.

Sincerely,

Associate Director for Economics and Government

#### APPENDIX IX

Tenure of office

#### PRINCIPAL OFFICIALS RESPONSIBLE

#### FOR THE ADMINISTRATION OF

#### ACTIVITIES DISCUSSED IN

#### THIS REPORT

DEPARTMENT OF COMMERCE				
SECRETARY OF COMMERCE: Frederick B. Dent	Feb.	1973	Present	
ASSISTANT SECRETARY FOR DOMESTIC AND INTERNATIONAL BUSINESS: Tilton H. Dobbin Lawrence A. Fox (acting)	June Dec.		Present June 1973	
DEPARTMENT OF DEFE	NSE			
SECRETARY OF DEFENSE: James R. Schlesinger William P. Clements, Jr.	June	1973	Present	
(acting) Elliot L. Richardson	May Jan.	1973 1973	June 1973 Apr. 1973	
ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS): Arthur I. Mendolia Hugh McCullough (acting)	June Jan.		Present June 1973	
DEPARTMENT OF THE INT	'ERIOR			
SECRETARY OF THE INTERIOR: Rogers C. B. Morton	Jan.	1971	Present	
ASSISTANT SECRETARY, ENERGY AND MINERALS: Jack W. Carlson	Ana	107 <i>l</i> i	Present	
Charles K. Mallory III	Ů			
(acting) Stephen Wakefield	Apr. Mar.		Aug. 1974 Apr. 1974	

#### APPENDIX IX

	Tenure of From		office <u>To</u>	
GENERAL SERVICES ADMINISTRATION				
ADMINISTRATOR OF GENERAL SERVICES: Arthur F. Sampson Robert L. Kunzig			Present June 1973	
DIRECTOR, OFFICE OF PREPAREDNESS:  Leslie W. Bray Edward R. Saunders, Jr.	Oct.	1973	Present	
(acting) Haakon Lindjord (acting)	Aug. July	1973 1973	Oct. 1973 Aug. 1973	
DIRECTOR, OFFICE OF EMERGENCY PREPAREDNESS:				
Darrell M. Trent (acting)	Jan.	1973	June 1973	
OFFICE OF MANAGEMENT AND BUDGET				
DIRECTOR: Roy L. Ash	Jan.	1973	Present	
DEPUTY DIRECTOR: Frederick V. Malek	Jan.	1973	Oct. 1974	
ASSOCIATE DIRECTOR, ECONOMICS AND GOVERNMENT: Walter D. Scott	Mar.	1973	Present	

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