



**AMERICAN
MINING
CONGRESS**

FOUNDED 1897
SUITE 300
1920 N STREET NW
WASHINGTON
DC 20036
202/861-2800
TWX 710-822-0126

Officers

Chairman:
Ralph E. Bailey

**Vice Chairman and Chairman,
Finance Committee:**
Harry M. Conger

Vice Chairmen:
Charles F. Barber
George B. Munroe
Pierre Gousseland
Robert H. Quenon
Thomas C. Graham
Walter E. Ousterman, Jr.
Richard A. Lenon
Samuel K. Scovil
Thomas D. Barrow

President:
J. Allen Overton, Jr.

Secretary and Treasurer:
Henry I. Dworshak

Directors

George B. Munroe, New York
Stonie Barker, Jr., Lexington KY
P. Malozemoff, New York
Charles F. Barber, New York *
Otes Bennett, Jr., Cleveland
Robert W. Hutton, Greenwich
Richard A. Lenon, Northbrook IL
E.B. Leisenring, Jr., Philadelphia
Ralph E. Bailey, Wilmington
Paul W. Douglas, Greenwich
K.E. McElhattan, Pittsburgh
Samuel K. Scovil, Cleveland
Thomas A. Holmes, Woodcliff Lake NJ
Pierre Gousseland, Greenwich
A.M. Wilson, San Francisco
Robert H. Quenon, St. Louis
Ralph F. Cox, Denver
Thomas D. Barrow, Houston
Frank A. McPherson, Oklahoma City
W.A. Griffith, Wallace ID
Robert F. Anderson, Cleveland
Calvin A. Campbell, Jr., Chicago
Harry M. Conger, San Francisco
Robert M. McCann, Bethlehem
Richard G. Miller, Jr., Chicago
Walter E. Ousterman, Jr., Oakland
R.J. Gary, Dallas
Michael A. Morphy, El Monte CA
Charles W. Parry, Pittsburgh
Frank V. McMillen, Danbury
R.J. Assheton, Los Angeles
Kenneth J. Barr, Englewood CO
A.W. Calder, Pittsburgh
Gino P. Giusti, Stamford
Ralph L. Hennebach, New York
William G. Kegel, Indiana PA
John A. Wright, Clayton MO
Thomas C. Graham, Pittsburgh
Robert McInnes, Cleveland
Douglas J. Bourne, Houston
W. J. Conway, Los Angeles
Raymond M. Ingram, Houston
James R. Voisinet, Dallas
Milton H. Ward, New York
Ian MacGregor, Greenwich †
N.T. Camicia, Greenwich †

* Immediate Past Chairman
† Honorary

Executive Registry	
85-	334

January 11, 1985

7 FEB 1985

The Honorable William J. Casey
Director
Central Intelligence Agency
Washington, D.C. 20505

Dear Bill:

It was great to have the opportunity to visit with you at The White House on Tuesday. I appreciated very much your concern with regard to the alarmingly rapid deterioration of the U.S. copper mining and processing sector of the economy and the questions this raises with respect to both national security and the nation's economic well-being.

In that regard, I enclose some most thoughtful comments by our friend, Chuck Barber, delivered recently in Arizona, which you wished to see.

I know that the demands of your reading schedule are monumental, but, frankly, Barber's comments deserve your reflection and review.

If there is any further information we might provide, or if we can be of assistance to you in any way concerning this or any other matter, it would be my pleasure to hear from you.

With warmest personal regards, I am

Sincerely,

Allen
J. Allen Overton, Jr.
President

Enclosure

DCI
EXEC
REG

P304

Remarks of
Charles F. Barber
Former Chairman
Asarco Incorporated

Mining Club of the Southwest*
Tucson, Arizona
December 8, 1984

More About Copper
--Reflections on Fundamentals in the Interdependent
World of the 1980's

Copper has been a big story here in Arizona all year--multimillion dollar losses on copper operations, layoffs, mine curtailments and shutdowns, the Phelps Dodge strike and, more generally, labor's response to austerity and the demand for greater productivity, the advocacy of Senator DeConcini and Congressmen McNulty and Udall, the President's denial of relief to the copper industry in the Section 201 case. And then, less than a month ago, Pennzoil's announcement that it had decided to withdraw from the industry and that Duval's copper properties were for sale.

This last has to have special poignancy here in Tucson. Duval's record as an operator and a successful innovator is outstanding. Pennzoil thus joins Atlantic Richfield, Louisiana Land, Occidental Petroleum and Texaco in withdrawing from the industry this year. These oil companies, which have the financial strength to hang on, have decided to write off their copper investments and put their energies to work elsewhere.

*American Mining Hall of Fame awards presentation banquet. The dinner was sponsored by the Mining Club of the Southwest Foundation, Inc.

-2-

Sir Ronald Prain, perhaps the dean of his generation in the industry, advised some years ago:

"Change is inevitable, and the fruits of success will go to those who adapt to it and make an ally and not an enemy of this almost universal human characteristic."*

It is fair to say that none of us foresaw the magnitude of the change to which we would have to adapt in our search first for the route to survival and then, down the road, "the fruits of success." Nor did we anticipate the extent to which the domestic copper industry would become a victim of other priorities of the U.S. Government.

The economics of the domestic copper industry have been thoroughly analyzed this year and all of you have been exposed to a great deal of heavyweight advocacy. I have subtitled my talk "Reflections on the Fundamentals in the Interdependent World of the 80's." My objective is to present the big picture in order to throw light on the President's decision in the Section 201 case. Each of you can then form your own judgment with respect to the future of the mines in Arizona.

I will begin my presentation with a number of oversimplified statements:

1. Copper is a capital intensive, cyclical industry producing a basic industrial material. Consumption is functionally related to the durables component of the gross national product on a world basis.

*Cited by Wolfgang Somes, "Mineral Policy of the Federal Republic of Germany and the European Community," 1984 American Mining Congress, Mining Convention, Phoenix, Arizona, p. 3.

-3-

2. A price representative of the economic value of copper depends on balanced markets. Historically a small excess of supply has produced a disproportionate decrease in price and vice versa. The markets are heavily influenced by expectations relating to the adequacy of supply and this is reflected both in the physical and futures markets.
3. Happiness in the copper mining industry depends on growth in demand over the cycle. It is easier to provide the required supply in an environment of growth. This brings good profits during the buoyant phase of the cycle and ameliorates mistakes in the timing of additions to supply.
4. Happiness in a copper mining company means having costs to market which compare favorably to those of its competitors in the free world and the financial strength to ride out the low phase of the cycle.

All this is elementary. Now a word about the demand side of the market equation.

On Demand

My generation had an exciting time in the copper industry. We were operating in an environment of growth. In 1950, the free world consumption of copper totalled about 2,500,000 tons of copper; by 1973 consumption had tripled to about 7,500,000 tons--a compound growth rate of over four percent per year. The challenge over this period was to discover, finance and develop properties in order to meet these steadily growing requirements. Silver Bell, San Manuel,

-4-

Pima and Mission and a number of other copper mines were developed near Tucson during this period. The return on investment was attractive. The United States government in the late 1960's considered security of supply of such urgency that it provided a major share of the financing for Duval's Sierrita mine under the Defense Production Act.

I should say a word about intensity of use. Growth of demand for material intensive products levels off as an economy matures. Broadly, the post World War II rate of growth of demand for copper was fueled in the 1950's by the rebuilding of Europe, in the 1960's first by the industrialization of Japan and the material needs of the Vietnam War and then later by above average growth in the developing countries. It was the expectation of continuing growth in the developing countries that fueled our buoyant expectations for the 80's.

At the same time copper was continuously engaged in the battle of substitutes with new materials and new technology. The energy cost inflation in the 1970's and the electronics revolution led to downsizing of products and less use of heavy materials. Your honoree last year, George Atwood of Duval, focused on the importance of an industry commitment to research, innovation and market development to win new markets and defend established markets. George Atwood and I first became acquainted as fellow directors of the Copper Development Association and the International Copper Research Association. We both believed in the importance of research and were committed to maintaining the strength of these industry research and market development organizations.

Putting this all together, the Bureau of Mines as recently as 1979 in its year 2000 study forecast a "most probable" rate of growth of 3.6% per year, leading to an annual requirement of 19.5 million tons of primary copper in the year 2000.*

At that time, the prospective inadequacy of supply by the mid-1980's was regarded as most serious. I participated in a conference in London in May 1980 convened jointly by the AIME and the Institution of Mining and Metallurgy (UK) to address the problem. The root concern was the long-term adequacy of supplies of minerals. This concern stemmed from the natural consequences of political turbulence in the developing world and of the unprecedented inflation which had occurred in the leading industrial countries. Together these influences had swept away the bases for long-term private investment in minerals projects. My contribution was to describe the immense gap between the price required to sustain existing operations and that required to develop new greenfield projects. I presented a study that showed that a projected price of at least \$2.35 per pound would have been required to justify construction of the Cuajone mine in Peru, had construction started in 1980.** I predicted there would

*Sousa, The U.S. Copper Industry (Bureau of Mines, October 1981), p. 78.

**Barber, Mineral Investment in an Anxious World, in National and International Management of Mineral Resources (The Institution of Mining and Metallurgy, London, 1981) pp. 133-152.

-6-

not be any more such mega projects for a long time. Michael West, publisher of the Mining Journal (London) referred to Cuajone and La Caridad, then nearing completion in northern Mexico, as "the last of the dinosaurs." The late Sir Mark Turner, then Chairman of The Rio-Tinto Zinc Corporation, who had just announced the purchase of Texasgulf's interest in the Cerro Colorado project in Panama, shared the platform and defended his contrary judgment. It provided some lively by-play at the meeting.

The recession which began in 1981 and bit severely in 1982 brought losses and a round of severe cost cutting to the domestic copper industry. But the industry still anticipated a resumption of the projected growth in demand. This expectation was then shattered with stunning force following the financial crisis in Mexico in August 1982.

As the enormity of the LDC debt problem became clear, it also became clear that Latin America and much of the developing world was faced with an extended period of austerity and limited growth, and that all but the most urgent of the materials intensive capital projects then in various stages of planning would have to be deferred.

More recent forecasts by the Bureau of Mines and the industry have reduced anticipated average growth of consumption of copper over the coming decade to from 1% to 1 1/2% per year.

This reduction in the projected average rate of growth of demand has had a severe impact on the copper industry. On average, large and growing amounts of copper will still be required each year. But the price environment is likely to be poor because the appropriate response on the supply side of the equation, given existing equipped capacity, will be vastly more difficult.

Supply

The adjustment of supply in times of reduced demand has always been difficult for the copper industry because of the ponderous momentum of production and the fierce perverse dynamic which tends to rule the industry during recessions. This latter follows from the relationship between operating rates and/or grade of ore mined and unit costs.

The copper pipeline is long. The time required for mining-milling-smelting-refining-transportation to fabricator-manufacture of wire, sheet, shapes, alloys, etc. -transportation to manufacturer of products, etc. to market is long. And when prices weaken, the pressure on the miner is both to increase thruput and to raise the cut-off grade to get more units of production per period in order to maintain revenue. That response increases output and exacerbates the pressure on price. Historically, the burden of responding constructively to conditions of excess supply has been assumed by the largest and lowest cost producers because they tend to be the producers with financial resources to accept reduced revenues for a period in the interest of relieving pressure on price.

In former times, the inexorable cyclicity of the copper industry has led to bankruptcies and consolidations within the industry during each significant recession. By the late 1940's and continuing to the mid-1960's, eight companies, two British, one Belgian, and five U.S., controlled three-quarters of the free world's supply of primary copper.

-8-

These companies were headed by experienced men committed to the copper industry. Demand was cyclical, but to quote Ronald Fraser of the Anglo American group, there was "sufficient community of understanding and resolution among producers to minimize the adverse effects (of reduced demand) by taking appropriate measures."*

The structure of the industry changed dramatically in the late 1960's. By the time of the first oil shock in 1973, more than 40% of the supply of primary copper had passed into the hands of governments of developing countries. If we were to add the additional supply influenced by LDC government policy, the figure would be well over 50% of the supply.

The mining companies owned by governments in the developing countries have not at any time to date made a significant response to the economic imperative of reduced demand. They did not do so in the 1975-77 recession nor in the 1981-82 recession. They continued to operate at maximum available capacity in response to social priorities and the need for foreign exchange. The result for all of them and for all others in the industry has been the sacrifice of economic rents attributable to their natural resources and an immense transfer of wealth from the lesser developed producing countries to the industrialized consuming countries.

Thus the full burden of adjustment to reduced demand was, and continues to be, thrust on the private North American companies, as those of us here in Arizona know all too well.

*Ronald Fraser, "The Copper Industry: Then, Now and Tomorrow," presented at the Mining and Metallurgical Society luncheon, March 8, 1983, Atlanta, Georgia.

The irony of this record is that this lack of response has been financed, to a considerable extent, by support mechanisms the industrialized countries have put in place to aid and assist the developing countries.

I refer to the International Monetary Fund (IMF), the World Bank and the Multilateral Development Banks (MDBs). I find it extraordinary that over the last two years, the IMF alone has made available to six countries which produce over 50% of the supply of primary copper \$1.2 billion under its Compensatory Financing Facility, primarily because of the low price of copper and has made available to these same countries another \$2 billion under its general credit facilities because of shortfalls in the availability of foreign exchange. During the same period the multilateral development banks loaned additional tens of millions of dollars at concessional terms to Chile, Zambia and Zaire for investment in their copper industries.

Three billion dollars is a lot of money. I have urged that the IMF and the MDB's should contribute to the solution of the problem of excess supply of copper and not be part of the problem. I have made a number of suggestions to that end.* Senator DeConcini and Congressman McNulty have sponsored parallel legislative initiatives. To date there has been only a limited response by the international financial institutions.

Policy Issue

That is the setting. I come now to the policy issue that confronted the Administration in the Section 201 case.

*See American Banker, "Compensatory Financing Rules Can Be Counterproductive," September 27, 1983; "Economics of Copper in the Mid-80's; A Role for the Multilateral Financial Institutions," Materials and Society, Vol. 8, No. 3 (1984) pp. 481-489.

1. One of the highest priorities of the United States Government is to maintain the stability of the international financial system. This is regarded as "an all win or all lose situation, there is no in-between."* Hence the extraordinary measures to help Mexico, Brazil and Argentina, the largest debtors, avoid default. Hence, the pressure on the U.S. Government, the IMF and the commercial banks to accommodate the debtors. Servicing and eventual repayment of the debt will require both austerity and growth over an extended period. To make this scenario credible, the leaders of the industrialized countries have established a growth target for the industrialized countries of not less than 3% per year in real terms. Even this projects a sustained period of restrained growth in the developing countries and a deferral of all but the most urgent capital intensive, infrastructure projects. "Mega-projects are out," said one informed banker, referring to mining projects in developing countries.**
2. The Administration's policy strategy is based on economic growth -- free up the economy, encourage investment, avoid protectionist measures. The Administration's economic program has had remarkable success to date in stimulating growth. The performance of the U.S. economy has been the envy of the world. The gross national product has grown

*See "The Global Repercussions of U.S. Monetary and Fiscal Policy," Economic Policy Council of the UNA-USA (September 1984). The quotation is from Christian F. Baiz III, Vice President, Manufacturers Hanover Trust Company, "Metals and Mining Industry-A New Agenda," presentation to Society of Mining Engineers, Denver, Colorado (October 26, 1984)

**See Baiz, cited above.

by 15% over the last two years, albeit from a low base. This is the strongest advance for the U.S. economy in any two year period since World War II. Notwithstanding the strong dollar, more jobs have been gained in the United States than have been lost in the relatively few severely impacted industries.

The copper industry has participated in this advance in terms of consumption. Data available as of this date indicates that free world consumption in 1984 may be the greatest ever; it will surely be second only to 1979. Stocks on the terminal exchanges in London and New York have declined almost 50% since their peak in January - including each of the last three weeks. Although there may be some offsetting increase in refiners stocks, overall the level of inventories has declined substantially.* Nonetheless, because of prior conditions of excess supply and resulting overhanging stocks, the price of copper in real terms in dollars has been and remains at the lowest level in the century, except for slightly lower prices for a brief period in 1932.*

This is the setting. What I have just said is stated in the President's order in the Section 201 case.

*See Richard de J. Osborne, President, Asarco Incorporated, Presentation to Quarterly Meeting of Securities Analysts (November 1, 1984).

-12-

The President's order denying relief relies on pure economic theory. "I have determined," he wrote, "that granting relief is not consistent with our national economic interests." He listed three reasons:

1. The imposition of import restrictions "would create a differential between U.S. and world copper prices." This would "seriously disadvantage the copper fabricating industry" and "over time, shrink domestic demand for copper and add to the serious problems faced by U.S. copper producers."
2. "Import relief would also affect the export earnings of the foreign copper-producing countries, many of which are heavily indebted and highly dependent on copper exports. It would, therefore, complicate our efforts to maintain the stability of the international financial system and lessen the ability of foreign countries to import goods from the United States."
3. Finally, "there are encouraging signs that economic recovery is beginning to have a favorable effect on world copper prices...stocks have fallen...a significant price increase is expected in the near future."

The reasoning is classic. Impose no restraints on supply, encourage demand, "resist protectionist acts" and the working of the market system through price over time "will foster...recovery." Note also the reference to the Administration's "efforts to maintain the stability of the international payments system."

In a speech in London in October, the Director of the Bureau of Mines reviewed the cost-cutting and other survival strategies of the

-13-

U.S. copper companies. These developments, he said, "illustrate the free market at work; they also justify it." "We will probably have to accept some decrease in our mineral self-sufficiency as a trade-off," he added, "but the trade-off is acceptable."* In contrast, Senator DeConcini commented: "From my vantage point, the President has written off America's copper industry and the tens of thousands of American jobs that go with it."**

These two comments present the policy issue:

1. Will markets recover in time to prevent the virtual shut-down of the U.S. copper mining industry?
2. Will the recovery be sufficiently sustained to provide a basis for continuing investment in the U.S. copper industry?

The President says "yes" to both questions. His Director of the Bureau of Mines applauds the cost reductions which have been accomplished by domestic producers in response to the relentless pressure of the "free market at work" and anticipates "some" decrease in U.S. production capacity which he states is "acceptable."

Senator DeConcini is not convinced. He, Congressmen McNulty and Udall, and the principal industry executives have stated forcefully their view that certain measures are required now to forestall the virtual destruction of the domestic industry. They state that the U.S. mines are competitive and could hold their own in the free market on a level playing field, but that the producers in the developing countries, financed both directly and indirectly by the international financial institutions, are playing by different rules. That is unfair and the U.S. Government should seek appropriate remedies.

*Robert C. Horton, Remarks to the American Metal Market London Metal Forum (October 8, 1984) p. 24.

**Letter to the Arizona Republic, November 7, 1984.

-14-

What do each of you think?

This is an important national issue. There is no way that U.S. manufacturing industry and the U.S. defense establishment can supply their needs without the continued availability of a major portion of the 1,000,000 tons of domestic capacity still operating - except in the very long term.

* * *

Q. Mr. Barber, What do you think is the future of the copper mines in Arizona?

A. Given the President's premises, I understand his decision in the Section 201 case.

I do not question the committment of the Administration to a growth strategy. The growth of trade and of the economic interdependence of nations over the post-war period has been an essential aspect of the sustained real growth and widely shared prosperity of the period.

I do not question the priority given by the President to maintaining the stability of the international financial system. In its present, extremely extended posture, I believe this presents a "we all win or we all lose" sort of challenge.

As a result of the strong economic growth in the United States and more modest growth in the other industrialized countries, consumption of copper in 1984 has been good and may turn out to be the highest ever. If the level of consumption is maintained in 1985, it is reasonable to anticipate, as the President stated in his order denying relief, "a significant price increase...in the near future."

-15-

I emphasize "near" future, because, as of this date, the price of copper remains below the costs of production of all but a handful of the world's copper mines and the costs of these few have been aided by devaluation of the local currency. The length of time that a private company can or will accept losses on operations is limited. Time runs out. As I noted at the outset, five oil companies which have a choice have decided this year to withdraw from copper mining in the United States. The capacity of the remaining mining companies to finance continuing operations is limited. That reality must command the attention of our national leaders. As I have said, there is no way the continuing needs of the United States can be supplied during periods of average and strong demand without the continued availability of the greater part of that capacity. The billions of dollars and years of time that would be required to replace that capacity elsewhere in the world is not and could not be available except in the very long term. Nor would the virtual loss of our economically competitive domestic copper industry be acceptable from any point of view.

The U.S. mines now operating are among the most efficient in the world and some of them represent the leading edge of copper mining technology. I hope Mr. T.C. Osborne's recent discussion of Asarco's cost reduction experience at the Mission mine in Arizona* will put to rest the notion that the major Arizona mines are not acceptably placed in the array of costs of the free world's copper mines.

*T.C. Osborne, Executive Vice President, Asarco Incorporated, Presentation to Security Analysts (July 26, 1984). See Engineering and Mining Journal, September 1984, pp. 21, 25.

-16-

To answer the question, I believe that the Arizona mines have a sound future. However, under existing conditions, they are a victim of other national priorities and time is running out.

We all hope and some of us expect that demand for copper will continue strong in 1985 and that, as stocks continue to decline, market forces will bring improved prices. The President's order states that he has "directed the Secretary of Commerce to actively monitor the domestic copper industry including inventories and the levels of copper imports." The situation is being closely monitored and I know that the concerns I have expressed are widely shared.

The longer term issues remain. The economics of the copper mining industry in the free world have been so bad for so long that they are forcing a widespread reassessment in both the United States and the developing countries of past strategies and policies.

I plan to continue to work encouraging public understanding of the issues and I hope that you will too. If we do, I have to be confident that there is a sound future for the majority of the copper mines of Arizona.