

**THE DEPENDENCY OF  
ARIZONA  
ON THE COPPER INDUSTRY**

A brief, submitted December 21, 1946, to the  
Committee for Reciprocity Information by the  
Arizona Copper Tariff Board in Opposition to  
the inclusion of copper in reciprocal tariff  
treaty negotiations.

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## **ARIZONA COPPER TARIFF BOARD**

SAM H. MORRIS, Chairman  
Globe, Arizona

LIN B. ORME, Secretary  
Phoenix, Arizona

EDWARD G. DENTZER  
Greer, Arizona

CHARLES R. KUZELL  
Douglas, Arizona

MARK GEMMILL  
Prescott, Arizona

# ARIZONA COPPER TARIFF BOARD

528 TITLE AND TRUST BUILDING  
PHOENIX, ARIZONA

SAM H. MORRIS, CHAIRMAN  
GLOBE, ARIZONA  
LIN B. ORME, SECRETARY  
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MARK GEMMILL  
PRESCOTT, ARIZONA



PHOENIX, ARIZONA

The Chairman  
Committee for Reciprocity Information  
Tariff Commission Building  
Eighth and E Streets, Northwest  
Washington, 25, D. C.

Subject: Reciprocal Trade Agreement Negotiations

Product: Copper: Ore, concentrates, metal, scrap, mill products and  
certain manufactures. 6400.400--6418.100--6430.000--  
6430.020--6430.100.

Dear Sir:

Presented herewith is a brief submitted by the Arizona Copper  
Tariff Board, State of Arizona, in opposition to any reduction in the  
existing 4-cent per pound excise tax on copper.

The facts, figures and data herein presented, independently  
and collectively, warn of the danger and menace to our national security,  
and to our economic recovery, attendant upon any tariff reduction on  
copper.

For the benefit of those who do not wish to consider the  
brief in detail a generalized summary thereof follows on the next two  
pages.

Respectfully submitted on behalf of the people of Arizona,

Sidney P. Osborn  
Governor of Arizona

Phoenix, Arizona,  
December 16, 1946.

The Arizona Copper Tariff Board  
created by act of the Legisla-  
ture of the State of Arizona in  
1933:

Sam H. Morris, Chairman,  
Globe, Arizona

Lin B. Orme, Secretary,  
Phoenix, Arizona

Edward G. Dentzer  
Greer, Arizona

Charles R. Kuzell  
Douglas, Arizona

Mark Gemmill  
Prescott, Arizona



## GENERALIZED SUMMARY

This brief is submitted in opposition to any reduction in the existing 4-cent per pound excise tax on foreign copper.

1. We oppose any reduction in the existing import duty on copper for the same basic reasons that impelled Congress to impose the excise tax in 1932, and thereafter to extend its effective period several times (in 1933 - 1935 - 1937 - 1939).

The same facts which were presented to the 76th Congress on this subject are pertinent today, plus the additional and very grave ones we have learned from World War II.

2. The nation must not be without an adequate metal supply. Copper is the most vital of such metals because of its inherent properties and varied uses. Secretary of War Patterson has stated:

"An army without copper would be an army without speed, maneuverability, fire power or communications. It would not last a day in battle."

3. To assure national security and safety is the paramount duty of every government official. It is also the concern of every citizen.

World War II has taught us that the nation best fitted to survive in this machine age is the one best supplied with metals.

4. To a great degree World War II was a metal war. Metals in enormous quantities were an absolute necessity. Copper played a very vital role, particularly in electrically controlled mechanism, in communications, in the manufacture of shells, etc.

5. We can supply our own domestic copper requirements if the price permits:

A. Full operation of our mines.

B. Development of new ore bodies.

(Note: Within the past year the existence of a new copper ore body in this State has been proved by drilling to contain upwards of 100,000,000 tons of recoverable ore.)

C. Mining of fringe or marginal ores.

D. Production of copper from ores of below average grade through advanced mining and metallurgical practices.

(Note: B, C, D, above, not possible during the war.)

6. Copper production is a primary industry in Arizona. That industry cannot exist in this State, nor, indeed, in the United States, if the tariff on foreign copper is removed because of:

A. Much lower production costs abroad resulting from:

a. Higher grade ores

b. Greater ore reserves

c. Low-cost peon labor



- d. Lower taxes and overhead
- e. Less workmen's compensation, social security, etc.
- f. Lower standards of living.

7. No injury is done our Nation by development of its mineral resources, and the steady employment of American workmen, especially when the commodity (copper) is absolutely indispensable in war times - and vitally important in peace.

8. The Strategic and Critical Materials Stockpiling Act directs the stockpile board to purchase, where possible,

" . . . to encourage the conservation and development of sources of these materials within the United States . . . "

and " . . . it is the policy of the Congress and the purpose and intent of this Act to provide for the acquisition and retention of stocks of these materials within the United States . . . "

Obviously, this mandate cannot be followed if the excise tax is removed because:

- A. Recent wage increases, plus higher materials costs, have added about 6 cents per pound to production costs of copper in Arizona.
- B. Any reduction in the tariff will have the effect of further increases in costs.
- C. A and B above, plus lower efficiency of the scarce mining labor, will result in prohibitive costs with their resultant shut-down of copper properties.

9. Practically all of Arizona's copper-producing communities are one-industry towns. They are solely dependent upon copper mining. The shut-down of the mines means disaster, not only to the miners and business men of the community, but in varying degrees to the State and the Nation.

10. Duty-free copper means curtailed domestic production. This, in turn, retards recovery and reconversion, and endangers our national security.

11. Excise tax does not necessarily increase copper prices.

12. Excise tax is not a barrier to reciprocal trade.

13. It is our understanding that the Trade Agreement Act requires a positive finding of fact that the existing duty is unduly burdensome upon, or restricts the foreign trade of the United States. We submit that no such finding can in good conscience be made with respect to the excise tax on imported copper.

14. The United States is completely self-contained with respect to its copper resources, production and needs, PROVIDED its own copper mines are safe-guarded from ruinous undercutting of prices through the duty-free importation of cheap-labor copper.

15. Finally, to whom do we owe assistance or allegiance, foreign governments and peoples, or our own nation and the returned veterans?

## INDEX TO CONTENTS

	Pages
Generalized Summary . . . . .	1-2
Statement And Brief Of Arizona Copper Tariff Board . . . . .	3-22
The Need For Continued Protection . . . . .	4
Any Lowering Of Copper Prices Will Cripple The Industry . . . . .	5
The Importance Of Copper Mines To National Security . . . . .	6
The Mistaken Idea Of Conservation . . . . .	6
What About The Copper Shortage? . . . . .	7
Copper Production And Consumption In The United States . . . . .	8
Our Mines Are Not Exhausted . . . . .	9
Full-Scale Operation Is Necessary For The Low-Grade Mines . . . . .	12
The Excise Tax Does Not Cause High Copper Prices . . . . .	12
Mining Offers No Reconversion Problem . . . . .	13
The Excise Tax Has Proved To Be Beneficial . . . . .	13
Copper Producers Have Not Sought A High Tariff Rate . . . . .	14
Copper Excise Tax Is Not A Barrier To True Reciprocal Trade . . . . .	14
The Loss Of Technical Skill To Foreign Countries . . . . .	15
United States Copper Mines A Source Of National Wealth . . . . .	16
The Importance Of Copper Mining To Arizona . . . . .	16
The Importance Of Mine Payroll Expenditures . . . . .	16
The Effect Of Wage Levels Upon Unit Costs . . . . .	18
The Copper Mines Carry A Large Portion Of Arizona's Tax Burden . . . . .	19
The Effect Of Copper Prices Upon Arizona's Tax Income . . . . .	19
What The Copper Mines Contribute To Other Industries . . . . .	20
General Conclusion . . . . .	22
Affidavit . . . . .	25
Tables:	
Copper Production And Consumption In The United States. . . . .	8
Comparison Of Average Yearly Prices For Electrolytic Copper In The United States And London . . . . .	13
The Value Of Copper Production In Arizona And In The Entire United States . . . . .	16
Wage Comparison 1938-1945 . . . . .	18
Expenditures By Copper Companies . . . . .	22
Exhibit: (Reprint Of Bulletin By Arizona Department Of Mineral Resources). . . . .	1-46





## STATEMENT AND BRIEF

Regarding

### COPPER TARIFF

by

ARIZONA COPPER TARIFF BOARD

#### STATE OF ARIZONA

Arizona has long been the leading copper producer in the United States and, as such, her growth, her prosperity, her entire economic structure is vitally dependent upon the mining industry. We have no thought of questioning the over-all desirability of the reciprocal trade agreement program. We are not taking a partisan stand as we believe that the entire issue lies above and beyond any limits of party or political interest. Our sole purpose here is to present for your consideration an outline of facts which are pertinent to this particular case, for we feel that there are certain conditions related to the American copper industry as a whole, and particularly in the State of Arizona, which deserve recognition.

Official recognition of the serious metal problem has been given by Congress in its wording of the Strategic and Critical Materials Stockpiling Act as quoted on page 2 hereof, and its additional statement to:

" . . . . prevent wherever possible a dangerous and costly dependence of the United States upon foreign nations for supplies of these materials in times of national emergency."

Honorable J. A. Krug, Secretary of the Interior, and the official head of the Bureau of Mines and the United States Geological Survey, in a speech made September 11, 1946, before the American Mining Congress in Denver, Colorado, stated:

"People in the industry and in Government are all conscious of the fact that the problems of the mineral industry are problems of grave national concern."

" . . . If we are to get on with the job of replenishing our mineral reserves, uncertainties as to governmental attitude and regulations must be ironed out and kept at a minimum. Policy dealing with these matters must be based on fact."

" . . . Our war experience showed us clearly that the best place to have mineral deposits in times of national emergency is within the bounds of the United States."

In the following outline we have stated what past experience has shown may be expected if any reduction is made in the present 4-cent excise tax on copper imports. We respectfully request that this presentation may receive the benefit of your careful analysis and impartial judgment.

It is our earnest contention that any reduction of the excise tax on copper will result in:

A lower domestic price for the metal.

Ruinous competition with low-cost foreign producers.

The closing of many copper mines in the United States.

Widespread unemployment in the copper producing areas, and particularly in Arizona.

The serious crippling of a basic industry upon the product of which the security of the United States is vitally dependent. It will result in our reliance upon foreign countries for future supplies of an indispensable defense material.

Immediate cessation of the development of new ore reserves.

The loss of ore reserves already developed.

Loss of technical staffs and skilled miners to other countries.

Discouragement of the technical training of younger men, due to the lack of incentive.

An enormous capital loss to investors.

Harm to other industries which depend upon mining for a portion of their business.

The abandonment of an important source of new national wealth.

#### THE NEED FOR CONTINUED PROTECTION

In 1939, when negotiations were started on the trade agreement with Chile, the committee recognized certain conditions which pertained to the copper industry at that time, and, as a result, refused to consider any reduction in the excise tax. All the conditions which existed then are still present, and other factors which have arisen since the beginning of World War II make the need for continued protection even greater than before.

The cost of producing copper has increased heavily, due to the higher costs of labor and materials. High wages must be maintained, and there is no reason to believe that production costs can be decreased in the future. Also to be considered is the fact that our mines have been forced to postpone development work and to concentrate on war production, mining their higher grade ores and leaving the lower grade material for recovery at a future date. They must now operate on poorer ores and spend large sums for needed development, an impossibility if the price of copper recedes appreciably below the present level.

Secretary of the Interior Krug states:

" . . . In the interest of the nation's welfare, let us join in drawing up a plan of action for a strong American mining industry, guaranteeing an adequate supply of mineral resources for industrial needs and national defense; and the best possible solution of the economic, legal and political problems involved."

Likewise of importance in the copper picture is the strengthened position of foreign producers as a result of the war. Production capacity has been increased in the mines of Chile, South Africa and Canada, some of it with the help of funds from our own government; and producers in those countries are all in a much stronger competitive position than they were in 1939. This argument has special application to Canada where a high percentage of copper production comes as a byproduct from the mining of other metals. It is not at all unlikely that some foreign producers

will be able to pay the 4-cent duty and still make a profit from sales of their metal in the United States market, which would indicate the need for an increase rather than a decrease in our protective margin.

A comparative example with respect to duty-free metals is afforded by the present-day status of mercury (quicksilver).

Prior to World War II our domestic consumption was greater than our production. The war stimulation and high prices resulted in a stepped-up domestic production sufficient to supply our needs, both for war and civilian uses. In July of 1944, mercury was released from the restrictions of General Import Order M-63. Today almost every American quicksilver mine is shut down, the trade being supplied by the imported mercury from Spain, Italy, Canada and Mexico. This constitutes another hazard to national security.

#### ANY LOWERING OF COPPER PRICES WILL CRIPPLE THE INDUSTRY

It has been asserted that a small drop in the price of copper would not be harmful to the industry. This is not true, since even the wartime ceiling prices were too low to allow many mines to operate, and any drop in price would force numerous mines to close down. Only a few of the low-cost producers could afford to remain in business.

The premium prices now allowed by the Government to some of the higher-cost copper producers are enabling them to continue operating and to get back on a self-sustaining basis. The allowance of these premiums is, in itself, a tacit recognition by our Government of the real need for higher metal prices and of the importance attached to an assured domestic supply of copper. The payment of premium prices will be discontinued when the present legislation expires on June 30, 1947. Tariff protection for our own mines will then be imperative if the industry is to survive.

The dependence of Arizona's copper mines upon an adequate price for the metal is demonstrated by the fluctuations in the number of operating mines from year to year. In 1929 when the average price was 17.6 cents, there were 198 producing copper mines in the State. Just three years later the number dropped to 17 following a slump in price to an average of 6.3 cents. Those which remained in operation did so at a loss and upon a greatly curtailed basis rather than face a heavier loss which would have been occasioned by a complete shut-down. Again in 1937, with an average price of 12.1 cents for the year, Arizona had 208 producing copper mines, and when in 1938 the price of copper fell to 9.8 cents per pound only 97 mines remained in operation. Had the operators not felt that this slump would be of short duration, many more undoubtedly would have shut down completely. Each fractional cent of decline in the metal price adds a few mines to the inactive list, and any considerable price depression which promises to be more than temporary will suspend activity in all mines, both large and small.



## THE IMPORTANCE OF COPPER MINES TO NATIONAL SECURITY

No thinking person would question the wisdom or necessity of expending billions for the purpose of maintaining a powerful military force for our protection from foreign aggressors. We have learned by bitter experience the folly and danger of permitting our national defenses to deteriorate and it is to be hoped that this error shall never be repeated. How then can we dare to jeopardize an industry upon which our military power is so vitally dependent? The menace to our security would be no greater if we were to destroy our steel mills and oil wells. In the words of Robert Patterson, Secretary of War:

"An army without copper would be an army without speed, maneuverability, fire power or communications. It would not last a day in battle."

If the excise tax had not been in effect, Pearl Harbor would have found the American copper mines in a deplorable and dangerous state of unpreparedness. There probably would have been fewer than a half-dozen producing mines in the country, and it would have required from two to five years to bring our production up to the necessary level. Projects like the huge Morenci open-pit would never have been started. The war might easily have been lost without American copper production, and it certainly would have been much prolonged.

The unfortunate discord among the powerful nations of the earth since the end of World War II surely emphasizes the need for maintaining our military and industrial strength. It has been demonstrated tragically that our aversion to war will not suffice to protect us from attack by an aggressor, and any sacrifice of strength on our part can be nothing less than an invitation to trouble. Military strength and industrial strength are so interdependent that the terms are almost synonymous and, without an assured ample supply of copper, no nation can be industrially strong.

## THE MISTAKEN IDEA OF CONSERVATION

Those who advocate closing our mines and leaving our ore reserves in the ground for future national emergencies are ignorant of several factors which bear upon metal production. Quoting Elmer Pehrson, Chief of the Economics Branch, United States Bureau of Mines:

"From a theoretical viewpoint this argument has appeal, but from a practical standpoint the cost is too great. \* \* \* The program would result in a resource waste because much of the unmined portions of deposits now developed probably never could be recovered after a prolonged shut-down. Also, the abrupt curtailment of mining would present a serious social problem in readjustment of the population that would be stranded in isolated mining areas. Huge capital losses would be incurred. For these reasons, the proposal does not seem to merit serious consideration."

Until ore is mined, milled, smelted and refined into metal, it is of no value whatever. The time required to bring into production a new mine, or one that has been closed down for any considerable period, ranges from several months to several years. Equipment left on an inactive property

deteriorates or is stolen and must be replaced before operations can be resumed. Underground workings must be unwatered or repaired, and an operating staff of supervisory and technical employees must be organized to plan and carry out the work. All of this requires time, and it is unpleasant to think what an aggressive attack upon this country could accomplish while our armament industry waited for dormant mines to be re-opened. Stockpiles of critical metals could carry the load for a brief initial period, but would be exhausted long before a crippled mining industry could attain full productive capacity. There would be a gap that might easily prove fatal to our nation.

Germany attempted to import sufficient stocks of metals and other war materials to carry her through a long struggle; but we know that she was forced to resort to substitutes at an early stage in the war, and that the shortage of critical metals was an important factor in her ultimate collapse.

The mere fact that the United States has immense reserves of minerals stored in the ground means nothing whatever from the standpoint of security. We must maintain a healthy mining industry to convert these minerals into metals above ground where they will be available for immediate use when needed.

#### WHAT ABOUT THE COPPER SHORTAGE?

The present short supply of copper, both in the United States and abroad, is being vociferously emphasized by those who advocate opening our domestic markets to foreign competition at the expense of our own security. The shortage of supply is freely acknowledged, but, in all fairness, let the picture be viewed in its entirety.

In these abnormal days it is difficult to name any commodity which is not in short supply. The demand for lumber, livestock and agricultural products, to mention a few, far exceeds our present production. There is no need here to inquire into the reasons for the deficiency in the outputs of other industries, but it should be pertinent to see just what has happened to copper.

During the four years from 1940 to 1944 Arizona's copper mines went "all out" in producing vitally needed metal. They cast aside the customary and prudent practice of allocating a substantial portion of their endeavors to the development of new ore, and used practically all of their meager supply of manpower to extract the ore which they already had developed. This, of course, could not go on indefinitely, and the industry began to feel the ill effects early in 1944. (See Table of Production on page 8.) The declines in production was inevitable and was aggravated by the extreme manpower shortage and by the labor controversies which followed the end of hostilities.

The net result of all these adverse factors has been an undue delay in recovery, and the mines are just now beginning the upward climb toward their ultimate productive capacity. The supply of labor is still far short of what is needed but is increasing slowly. New development work is in progress and new ore is being discovered. The industry is getting its feet on solid ground again, and, given half a chance, will reduce our present copper hunger to the status of an unpleasant memory. The following tables are presented to illustrate the potential productive capacity of the copper mines in the United States.

# COPPER PRODUCTION AND CONSUMPTION IN THE UNITED STATES

1925 to 1939  
(In Short Tons)

<u>YEAR</u>	<u>PRODUCTION</u> (SMELTER OUTPUT FROM DOMESTIC ORES)	<u>CONSUMPTION</u> (COPPER WITHDRAWN FROM STOCKS ON DOMESTIC ACCOUNT)
1925	837,435	700,506
1926	869,811	785,068
1927	842,020	711,480
1928	912,950	804,269
1929	1,001,431	889,292
1930	697,194	632,508
1931	521,356	451,032
1932	272,005	259,601
1933	225,000	339,350
1934	244,227	322,638
1935	381,294	441,370
1936	611,410	656,178
1937	834,661	694,905
1938	562,328	406,994
1939	712,675	714,377

Annual Average

15-yr. period	635,053	587,305
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## WAR YEARS

1940	909,084	1,008,785
1941	966,072	1,641,550
1942	1,087,991	1,670,633
1943	1,092,939	1,621,666
1944	1,003,379	1,632,709
1945	841,824	1,517,842*
To Sept. 1 - 1946	356,754	740,590*

Avg. for 6-yr.

War Period	983,548	1,515,531
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\*Figures from Copper Institute; all other figures compiled from Minerals Yearbook, United States Bureau of Mines.

The period covered in the foregoing tabulation was chosen to include extreme high and low points in the Nation's cycle of business as well as the years which were largely free from the influence of either world war. These years extend over an era of unparalleled prosperity and the fol-



lowing period of deep depression. They, therefore, should furnish a good average basis upon which to estimate probable future conditions in the copper industry.

A brief study of the figures in the above table makes one fact immediately evident. This is that, throughout the 15-year period, our mines were not operating at full capacity. Production during this time was adjusted to the current demand, and at no time did domestic consumption ever approach the productive limit of the mines.

Attention is also directed to the fact that, during the six years from 1940 to 1945 inclusive, under the stimulus of heavy war demands, our domestic copper mines maintained an average annual production of 983,548 tons of refined copper. This was accomplished in the face of a critical manpower shortage, a factor over which the producers had no control. There is no reason to doubt that, with adequate labor available and with the assurance of a safeguarded domestic market, this production could be substantially increased.

At the present moment one of Arizona's major producers is in the midst of a million-dollar exploratory undertaking which has already definitely added more than 100 million tons of new ore to this country's reserves. Further heavy expenditures will be necessary in order to convert this vast deposit into the form of useful metallic copper. The work was undertaken with the confidence that the protective excise tax on copper, under no conceivable circumstances, would be reduced. Work of this sort is based upon long-range planning, and it is not difficult to envision how abruptly and completely the operation may be suspended if the future of the industry is to be jeopardized by low-cost foreign labor competition.

Another important factor has been carefully ignored by those who shout predictions of a copper shortage. This factor is secondary or scrap copper. Being practically indestructible, copper is salvaged in great quantities each year, to be used over and over again. The production of secondary copper has had a steadily growing influence upon the industry as is evidenced by the fact that this production amounted to 1,086,047 tons in 1943, a quantity as great as was produced in new metal from our mines. The salvage of scrap copper in this postwar period will be enormous. It can constitute a dangerous surplus in our own country if provision has not been made for the absorption of excess stocks into government-owned stock-piles.

#### OUR MINES ARE NOT EXHAUSTED

The terms "ore reserves" and "depletion" have been widely misused by alarmists who are attempting to spread the impression that America's copper mines are practically done for. These individuals point to published figures which purport to show that at present or contemplated rates of depletion, our ore reserves will be completely exhausted within

10 or 15 or 25 years. At first glance the picture seems truly alarming, but we need only to consider a few facts in order to realize that there is no actual basis for worry.

At the end of World War I, when our mines had passed through a period of capacity production and curtailed development, and ore-reserve figures showed a decrease from previous years, the same dire predictions were voiced in many quarters. At that time the large, low-grade porphyry copper mines were working on material which contained from 25 to 35 pounds of copper per ton of ore, and it was generally considered that the minimum limit had been reached. Material which contained a lesser amount of copper was not regarded as ore and, of course, was not included in any estimated reserves.

Since then, as the result of improvements in mining methods, mechanical equipment and metallurgical processes, millions of tons of material have become economically valuable. Rock containing as little as 12 pounds of copper per ton is being profitably mined. By the alchemy of human ingenuity, waste has been converted into ore. True, the reserves of 25 years ago are gone, but our mines are still working and during the late war they surpassed all previous production records.

A fact which makes this achievement all the more remarkable is that copper prices during the past decade have averaged under 12 cents per pound as against an average price of almost 15 cents during the 12 years from 1919 to 1930. How, then, in the light of this performance, can anyone presume that the end is in sight? Progress has not ceased, and so long as there remains an incentive we may confidently anticipate that copper will be produced from Arizona's hills for generations yet to come. Had the American mining industry in 1920 subscribed to the pessimistic "have-not" philosophy of that day, the nation would have been in a sorry plight indeed during the recent conflict.

In estimating the ore reserves of any given mine, the calculations are predicated upon two basic factors, viz.: The total cost per pound of copper produced, and the price per pound for which this copper will be sold. The factor of production costs usually can be closely gauged by past experience. Copper prices in an uncontrolled market, however, are subject to wide variations, and for this reason it is necessary to adopt some arbitrary minimum level of copper content to determine what shall be designated as ore and what as waste.

With production cost as a reasonably constant factor, the price of copper automatically increases or decreases the estimated tonnage of ore reserves as it goes up or down. Material which is classed as ore when copper is selling at 16 cents may be of no economic value when the price drops to 12 cents. Reserve figures under these two conditions will, therefore, show a wide variation with a decrease under the lower price even though not a pound of material has actually been mined during the period of

price change. A further decline to 10 or 8 cents a pound would be reflected in successively larger reductions in total reserves. Conversely, higher copper prices would give economic value to many tons of material previously unminable at a profit and not included in reserve tonnages.

In most copper ore bodies there is no definite line of demarcation between metal-bearing and non-metal-bearing rock. There is instead a gradual diminution of the valuable metallic constituents as the distance from the center of the area increases. The sharp outlines on the geologist's maps are simply the limits of material which is economically minable under the conditions upon which the ore estimate has been based. By assuming a different set of conditions, these limits may be greatly expanded or contracted, and the estimated ore reserve tonnage will be correspondingly increased or decreased.

From this it should be clear that the term "ore reserves" applies to a given set of conditions at a given time. It is an arbitrary figure which can properly be used only in relation to the conditions and the time to which it applies. A change in any of these factors, therefore, will necessitate an adjustment to correspond, and the use of present data on ore reserves in forecasting future conditions is obviously false reasoning.

The above applies to mineralized areas which are already known and developed. It does not include those immense spaces in the western states which have not as yet been touched by the hand of modern scientific prospecting. When it is realized that in Arizona no more than 3 per cent of the potential mineral bearing areas have been thoroughly and scientifically explored, one finds difficulty in subscribing to the theory that our mineral resources are nearly gone. Recent discoveries and refinements in the field of electronics are already being adapted for use in geophysical exploration. Russian scientists are reported to have achieved astonishing success along these lines, and to anticipate anything less from our own technicians is pure, undiluted pessimism.

Harold L. Ickes, a former Secretary of the Interior, had this to say in 1943:

"There has been far too much tendency to resolve all our problems of mineral shortages in favor of importation. This has been discouraging to our western mining industry. \* \* \* I see no cause for alarm in any projected rate of depletion of our mineral resources, provided the necessary steps are taken to insure that, as a given mineral resource is depleted, other mineral resources are developed which will take its place."

In September 1946 Secretary of the Interior Krug stated:

" . . . There are still undiscovered mineral deposits of great wealth in the United States. However, the task of finding new deposits is beset with more and more difficulty and involves greater and greater financial risk."



As already shown, due to the stress of war production and an acute shortage of manpower, the normal development of new ore reserves has necessarily been deferred and reserve figures must, of course, show a decrease for the war years. If, however, the mining industry can be assured of a continued life by the protection of a domestic market for its products, there will be a resumption and expansion of development work just as rapidly as manpower becomes available.

#### FULL-SCALE OPERATION IS NECESSARY FOR THE LOW-GRADE MINES

The large, low-grade copper mines in the United States are totally dependent upon full-scale production in order to attain high efficiency and low costs. It is only by treating an enormous tonnage of material that they can recover enough copper to carry the expense of operation and to return, over a period of years, the large capital investment necessary to bring such a property into production. A single company made an initial investment of more than 28 million dollars in preparing the great Morenci open-pit mine for production. Almost five years' time was required to do the work. This one operation has already furnished millions of pounds of critically needed copper for the nation's war needs, and from material which was worthless when operations were on a smaller scale.

#### THE EXCISE TAX DOES NOT CAUSE HIGH COPPER PRICES

Proponents of a reduction of the 4-cent excise tax on copper have advanced the argument that this duty is forcing American manufacturers to pay a higher price for domestic copper than they would have to pay if they were allowed to import foreign copper for domestic uses. The falsity of such a contention has been proved by the close adherence of United States and London prices during the period from 1934 to 1939 when the duty was in full force and effect. Throughout this period the price of copper in the United States never varied more than a fraction of a cent from the foreign level, and during part of the time, the domestic price was actually lower than in London.

This condition was not due to any altruistic motives on the part of the copper producers, but to the natural effect of economic influences. It is clearly evident that the tax was just high enough to balance the lower production costs of the foreign producers and to prevent their wholesale entry into the American market. A lower tax would have allowed them to undersell American producers at a profit to themselves, and any considerable increase in the domestic price would have had the same effect. If prices in the United States market had risen above the London price, the effect of the duty would have been reduced by just that much, and a 4-cent differential would have nullified the tax completely.

In establishing the duty at 4 cents, Congress recognized that as the minimum level which would place the American copper producers on fairly even terms with low-cost foreign competitors. The legislation was passed after careful deliberation and the consideration of a mass of in-

controvertible evidence as to its desirability. There was no intent to provide an opportunity for inordinate profits to the producers at the expense of American copper consumers, and the price record shows that nothing of the sort has occurred. The only effect of the duty has been to stabilize the market and prevent excessive price fluctuations.

#### COMPARISON OF AVERAGE YEARLY PRICES FOR ELECTROLYTIC

##### COPPER IN THE UNITED STATES AND LONDON

(Prices in cents per pound)

##### PRICE F.O.B. REFINERIES

<u>YEAR</u>	<u>IN UNITED STATES</u>	<u>LONDON PRICE</u>
1934	8.43	7.50
1935	8.65	7.75
1936	9.47	9.47
1937	13.17	13.10
1938	10.00	9.91
1939	10.97	10.07

(Figures from Minerals Yearbook, U. S. Bureau of Mines)

Any price comparison for the years since 1939 would mean little, since Britain in that year pegged the price abroad at approximately 9 cents, and in 1941 domestic prices were placed under government control with a ceiling price of 12 cents.

#### MINING OFFERS NO RECONVERSION PROBLEM

The mining industry offers no reconversion problem and can continue to employ hundreds of thousands of workers through the critical period which we have entered. Most skilled mine workers find it difficult to adapt their training and ability to other lines of work, and these workers would be severely handicapped if forced to abandon their highly specialized trade and to seek a fresh start in work with which they are not familiar. An interchange of workers, even in different types of mining, is not satisfactory, as has been proved during the war. It was found that coal miners, as a rule, were unable to do efficient work in the metal mines and that metal miners were similarly unadaptable to coal mining. Methods differ greatly in different parts of the country, and the great majority of mine workers spend their entire lives within a comparatively small radius because their training and experience is of greatest value in their own particular district. These facts nullify the argument that increased production in other industries would take care of those who might lose their jobs by the closing of the mines.

#### THE EXCISE TAX HAS PROVED TO BE BENEFICIAL

It is being argued that the protection afforded by the 4-cent excise tax is not enough to really benefit the small, high-cost producers of copper, and that the large, low-cost mines do not need this protection. Such a statement, if applied to two given mines for comparison, might be perfectly true; but when generalized to cover the entire mining industry

it loses much of its force. There is no denial that there are some small mines with extremely high production costs which could not operate at a profit even with copper protected by a 20-cent duty. There are possibly one or two low-cost mines which might continue to operate with the price of copper as low as 8 cents. But in between these two extremes are the great majority of our mines which furnish the bulk of the domestic output. No arbitrary line can be drawn between high-cost and low-cost operations, and any generalized statement such as the one cited at the beginning of this paragraph cannot be supported by facts. In this connection it should also be remembered that income taxes will take adequate care of any producer who may be able to earn an excessively high return. It, therefore, seems illogical to penalize the high-cost producer in order to prevent large gross incomes to the low-cost mines.

#### COPPER PRODUCERS HAVE NOT SOUGHT A HIGH TARIFF RATE

The American copper industry has never sought a high tariff rate. It has asked only, and with complete justification, that the rate be high enough to enable it to compete on equal terms with foreign producers. Costs over which it has no control, such as taxes, wages, social benefit payments, safety costs, etc., are far higher in this country than abroad and cannot be overcome by the higher efficiency of our operations. This fact has been recognized by the Congress in the establishment of the present excise tax and the need for the continuance of the tax has been answered by its repeated inclusion in the revenue bills since 1932. Mining costs in the United States are certain to remain relatively high for an indefinite period, and the need for protection is now greater than ever.

#### COPPER EXCISE TAX IS NOT A BARRIER TO TRUE RECIPROCAL TRADE

Any reduction of the present tariff rates on metals supposedly would be made for the purpose of increasing the volume of our trade with foreign countries which produce those metals. If this trade is to be truly reciprocal, it is our contention that, in the case of metals, such a reduction will fail completely in its purpose. Under the provisions of the existing Tariff Act our manufacturers are permitted to import any quantity of foreign minerals or metals, either entirely free of duty if smelted and manufactured in bond, or with a refund of 99 per cent of the duty as a "drawback" when the manufactured articles are exported. The manufacturers are thus able to purchase whatever metal they need for export manufactures at the lowest obtainable price. By this provision in our tariff laws the trade balance with any given country is automatically equalized, and such trade is truly reciprocal. To this condition there can be no objection from any quarter, either here or abroad.

A reduction in our tariff rates on metals, however, will bring about an entirely different set of conditions. It will open our domestic market to foreign producers in all the "most favored nations" and allow them to flood that market with their products at the expense of our own



industries. If this is allowed we may, of course, anticipate an increase in our imports; but we must not fail to reckon the cost in the loss of our self-sufficiency.

Can we afford the temporary enjoyment of cheaper raw materials if we must sacrifice our future national security to obtain them? Must we rely upon foreign sources for essential military needs in a time of national peril? Our experience in World War II has demonstrated the vital necessity of fostering and protecting the basic industries upon which we depend for our very existence.

#### THE LOSS OF TECHNICAL SKILL TO FOREIGN COUNTRIES

The American copper industry has attained its unparalleled efficiency as the result of highly developed technological processes and methods devised by the staffs of trained experts employed therein. The crippling of our copper mines inevitably would result in the migration of much of our technical skill to foreign fields of employment. Mining is a highly specialized industry, and the training and experience necessary to conduct successful mining operations are not readily adaptable to other professional lines. Without a properly trained organization to operate them, our mines would be of no value whatever in case of a national emergency.

From a long-term viewpoint, the mere threat of harm to the mining industry is certain to exert a powerful restraining influence upon the decisions of our young men who normally would choose mining as a profession. No alert youth would undertake the rigorous and expensive schedule of study required in our excellent engineering schools, nor the arduous period of practical training after graduation, if he had any cause to suspect that the industry was doomed to a struggle for existence and possible ultimate extinction. Yet it is upon these very youths that we must depend for our future reservoir of technical skill.

The American mining engineer is recognized today as the leader in his profession, as witness the demand for his services from countries all over the world. But any profession, if it is to remain strong, must receive a constant addition of new, young and vigorous blood. Mining, probably more than any other industry, requires a combination of physical stamina, courage, resourcefulness and determination, tempered with the wisdom and caution which only experience can bring.

Therefore, it is obvious that any factor which will discourage the training of new recruits in the profession is certain to have unwholesome repercussions in future years. Technical skill is one of the nation's greatest assets. It has made the United States the leading industrial nation in the world. We cannot afford to sacrifice so large a segment as is represented by the American mining profession.

## UNITED STATES COPPER MINES A SOURCE OF NATIONAL WEALTH

The importance of the copper mines as a source of new national wealth should not be overlooked. To maintain our solvency in the face of an enormous and unprecedented national debt, we must foster and encourage every possible means of increasing the income of the nation. The mere trading of one dollar for another is not enough to accomplish this purpose. The war cost a staggering loss of both life and material. Nature eventually will re-establish a balance in our population, but we ourselves will have to repair our material losses by new production in our basic industries.

A brief study of the figures in the following tables will serve to show what our copper mines can contribute toward the national income:

### THE VALUE OF COPPER PRODUCTION IN ARIZONA

#### AND IN THE ENTIRE UNITED STATES

(Values in round figures)		
<u>YEAR</u>	<u>ARIZONA PRODUCTION</u>	<u>TOTAL U. S. PRODUCTION</u>
1937	\$ 69,812,000	\$ 201,988,000
1938	41,316,000	110,216,000
1939	54,519,000	148,236,000
1940	63,544,000	205,453,000
1941	77,011,000	227,993,000
1942	95,200,000	256,766,000
1943	104,827,000	257,934,000
1944	96,741,910	236,797,000
1945	77,544,810	202,347,120 *
1937-1945		
TOTAL	\$ 680,515,720	\$1,847,730,120
1860-1945		
TOTAL	\$3,215,568,720	1845-1945 \$9,433,857,120

(\*Copper Institute data at ceiling price of 12 cents.)

### THE IMPORTANCE OF COPPER MINING TO ARIZONA

For more than seventy years the copper mines of Arizona have poured a ceaseless stream of metal into the nation's industries. The state has long ranked as the leading producer in the United States, its output accounting for approximately one-third of the total produced in this country. Arizona is today maintaining her place in spite of the tremendous quantities already produced, and there is no reason to believe that she cannot continue as the leader for many years to come. Nature has made her one of the world's most important sources of copper.

The record of Arizona's steady growth and progress is closely linked with the development of her copper industry. This has been achieved through decades of courageous and unremitting effort, and perseverance in the face of repeated discouragements. There is no easy road to success in mining. It takes courage, capital, determination and hard work, and the people of Arizona have proved themselves willing and able to supply all these prerequisites. Thousands of them have spent a lifetime in helping to build up the communities of which they are so justly proud. Their accumulated savings have been invested in homes or businesses in the various



mining towns throughout the state, and the life blood of all those towns is copper.

Contrary to a general impression in other parts of the country, the mining towns are not temporary excrescences of tents or tin shacks huddled indiscriminately in the desert. Instead they are substantial, orderly, established communities which will compare favorably with towns of equal population anywhere in the United States. They have their schools, banks, churches and public buildings. Their homes and gardens are the fruits of hard toil, visible evidence of community pride.

These are not "boom towns" in any sense of the word. They are permanent communities whose roots extend down into the earth, to the bodies of copper ore which nourish them. Any disturbance or damage to those roots is immediately reflected in the community which springs from them. This was forcefully and unpleasantly demonstrated during the years from 1932 to 1935, and the memory of those years still strikes fear into the hearts of Arizona's mining population. They have suffered, and they shrink from the thought of another plunge into economic disaster. A curtailment of operations would create serious financial problems for these communities. If the mines close, they are done for.

During the discussions which preceded the trade agreement with Chile in 1939, we presented certain statistical data which had been prepared by the Arizona Department of Mineral Resources. Those figures covered a period of normal prewar economic conditions and it is considered worthwhile to present at this time the attached bulletin prepared by the Arizona Department of Mineral Resources entitled The Dependency of Arizona on the Mining Industry. The bulletin presents full data over a period of several years during which the mining industry was not distorted by excessive war demands.

Abnormal circumstances brought about by the effects of war are of a temporary nature and cannot be taken as criteria for the long-term future of the copper industry. The use of various current figures in the following pages is made for the purpose of comparison rather than for attempting to forecast future conditions.

#### THE IMPORTANCE OF MINE PAYROLL EXPENDITURES

Of the several reasons for the wide difference in costs of production between Arizona's mines and those in foreign countries, probably the principal reason is the difference in labor costs. In the year 1938, 60 per cent of the money spent in the state by the larger producers was for wages and salaries. A total of more than \$17,000,000 was paid to employees in the industry, this amount representing almost a quarter of all payroll expenditures in the state. The money constituted the income of more than 10,000 employees and thus represented a livelihood for approximately 40,000 people, allowing for dependents. This figure applies only to those directly dependent upon mining. If we properly take into account those people engaged in other businesses which derive the bulk of their



income from the mining industry, the total number directly or indirectly dependent is found to be over 200,000, or approximately 40 per cent of the state's population.

Payroll expenditures of the six major copper producers in the state during 1944 amounted to \$28,721,620, due to a higher wage scale and a larger number of employees. More than 11,500 people were employed by these companies during the year, and the figure would have been much larger if labor had been available. While these figures are admittedly far above normal prewar levels, resulting from abnormal war conditions, they nevertheless serve to show the potential employment capacity of the mines. It must be remembered, however, that this employment capacity is predicated upon a substantial metal price structure which will permit full and profitable operation of the mines. Nothing of the sort could exist with the domestic copper market flooded by bargain-counter foreign metal.

For the year 1945 the payroll expenditures of 10 major copper producers in Arizona totaled \$24,104,545.94. This sum is approximately 20 per cent less than the 1944 payroll, but it was paid to approximately 30 per cent fewer employees.

#### THE EFFECT OF WAGE LEVELS UPON UNIT COSTS

Proceeding a step further on the subject of labor costs, there is an interesting comparison to be made between the average daily wage rate on some representative classifications of work in 1938 and on those same classifications in 1945. The comparison is shown in the following table:

	<u>WAGE COMPARISON 1938-1945</u>			
	<u>Average Daily Wage - 1938</u>	<u>Average Daily Wage - 1945</u>	<u>Amount Increase 1945</u>	<u>Per Cent Increase</u>
Miners	\$5.45	\$7.76	\$2.31	42.4
Muckers	4.84	6.96	2.12	43.8
Timbermen	5.75	8.13	2.38	41.4
Mechanics	5.75	8.25	2.50	43.4
Hoist Engineers	6.66	8.77	2.11	31.7
Surface Labor (Unskilled)	4.40	6.48	2.08	45.0
Unweighted Average Increase - 1945				41.3
(Figures from Mining Company Questionnaire.)				

The lack of sufficient data makes it impossible to compute a weighted average wage increase based upon the number of employees in each of the above classifications. It is, however, an indisputable fact that miners and muckers far outnumber all other classifications in the average mine, which means that the actual labor costs to the employing companies was probably 50 per cent higher in 1945 than it was in 1938. The addition of paid vacation allowances would further increase the figure over the unweighted percentage shown above. Overtime has not been considered in

the 1945 wage calculations herein. Only part of the year involved any overtime work and the data thereon were too fragmentary for safe averages.

Having established the foregoing facts in regard to labor costs, it is interesting to note what has happened to copper prices during the same period of time. According to Minerals Yearbook, United States Bureau of Mines, the average price of copper during 1938 was 9.8 cents per pound. In 1945 the price established under government ceilings was 12.0 cents. Premium payments to some of the higher cost producers raised the average price for the year to approximately 13.0 cents, an increase of 32.7 per cent over 1938.

It is thus apparent that the war years, having brought about an increase of approximately 50 per cent in labor costs and a corresponding rise of only 32.7 per cent in copper prices, have imposed a greatly increased unit cost which had to be entirely absorbed by the producers. One small copper producer estimates that his costs of production have increased 187 per cent over those for the year 1940. All current trends are toward higher rather than lower wage levels, and it is evident that these added production costs must be considered as a permanent factor which will continue into the future.

#### THE COPPER MINES CARRY A LARGE PORTION OF ARIZONA'S

##### TAX BURDEN

Referring again to data compiled by the Arizona Department of Mineral Resources, we find that mining property in the State of Arizona in 1938 accounted for 23.29 per cent of the assessed valuation of all taxable property in the state. This valuation was placed at more than \$90,000,000, and the actual amount of direct state and county taxes paid in that year by the five major copper producers amounted to \$2,827,000. These figures, of course, do not include the indirect taxes paid by mine employees in the form of property taxes on their homes, sales taxes on their purchases, income, inheritance, luxury taxes, etc. Such taxes are highly important in the support of the state government.

The mining counties in Arizona are particularly dependent for their income upon the copper mines. In these counties the mining companies paid from 30 to more than 70 per cent of the total taxes collected, an amount far greater than that paid by any other industry or group. Without the revenue from the mines, none of these counties could long continue to function.

#### THE EFFECT OF COPPER PRICES UPON ARIZONA'S TAX INCOME

To illustrate the enormous importance of the price of copper on the economy of the state, attention is directed to the wide difference in the assessed valuation of Arizona's mines brought about by changing levels in the metal prices. It has already been shown how the number of producing mines fluctuates from year to year, depending upon whether or not the price of copper is high enough to permit various mines to operate.

The assessed valuation of mining property is likewise subject to change, being greatly reduced when the mine is idle and increasing again when production is resumed.

Thus, in 1938, when the average price of copper was 9.8 cents per pound only 97 mines were in operation and the total assessed valuation of mining property in the state was \$90,035,468. In 1945 we find an entirely different picture. The ceiling price of copper had been set at 12 cents, with higher premium prices allowed for mines with high-cost production. In that year Arizona had almost 300 producing mines, and the total assessed valuation had increased to \$147,557,326. This amounted to 30.15 per cent of the valuation of all taxable property in the state. The percentage increase in valuation on mining property from 1938 to 1944 was approximately 64 per cent. During the same period, the valuation of all other taxable property in Arizona had increased approximately 30 per cent, or less than half that shown by the mines. It is thus evident that the price of copper has a profound and immediate effect upon the annual tax revenue of the state.

#### WHAT THE COPPER MINES CONTRIBUTE TO OTHER INDUSTRIES

As previously stated, copper ores and minerals are of no practical value until they are converted into metallic copper. So long as they remain locked in the earth they represent nothing more than so much idle wealth. They earn no interest, furnish no employment, produce no benefits to anyone. They are dead and wasted assets.

An active mining industry is the agency which converts potential wealth into actual and tangible assets, and in the process of conversion the benefits derived therefrom are distributed widely among other industries and businesses. Those which benefit indirectly are countless, and no attempt will be made to enumerate them. Direct beneficiaries of the copper industry are likewise numerous, but a few are specified simply to illustrate the tremendous importance which the production of copper assumes in other unrelated industries.

Expenditures made by the mining companies for supplies and equipment rank second only to those made in payment of wages and salaries. Items needed in the operation of mines, mills and smelters cover nearly every imaginable list of commodities, the bulk of which are produced in eastern, southern or midwestern states, or in the non-mining portions of the western states. It is impossible to obtain accurate figures covering the hundreds of smaller mines, but the information obtainable from the 10 major producers in Arizona indicates that the aggregate volume of purchases is enormous.

In the year 1938, five of Arizona's major copper producers spent within the state \$2,599,000 for supplies and equipment. Similar purchases outside Arizona amounted to more than \$6,000,000. During 1945, 10 of the leading copper companies expended \$4,112,393.21 within Arizona



and \$9,326,656.27 outside the state for supplies and equipment. The money spent by smaller producers for the same purpose would increase all of the above amounts to a much higher figure. Thus it may be seen what is contributed by one single copper mining state in just one phase of the national economy.

Consideration should be given also to the fact that in addition to Arizona, there are 11 other western states, as well as Michigan, North Carolina, Tennessee, South Carolina, Pennsylvania and Vermont which produce varying quantities of copper and which furnish corresponding support to other industries. There is not one single state in the nation which does not benefit to some extent by the sale of its products to those engaged in the production of copper.

Another direct beneficiary is the transportation industry. The railroads and truck lines receive a large volume of business through the movement of copper ores and metal as well as the supplies and equipment referred to above. Within Arizona there are hundreds of miles of railroad lines which owe their existence entirely to the copper mines, and which would have no more than salvage value if the mines were to cease operations. Arizona's major copper producers in 1938 paid a freight bill amounting to \$1,362,000 on intrastate shipments and more than \$3,000,000 for shipments outside the state. In 1945 the payments amounted to \$1,554,997.92 and \$6,094,782.29, respectively, for intrastate and interstate freight shipments. During the period from 1912 to 1938, over 86 per cent of the revenue tonnage carried by the railroads within the state was attributable to the mines.

Agricultural, lumber and livestock producers in non-mining portions of Arizona derive a large share of their income from the copper industry which furnishes a ready market for much of their produce, and all of these industries are hard hit when mining is curtailed.

In addition to furnishing a convenient market for agricultural products, the copper companies are heavy purchasers of electrical power which is generated at irrigation storage dams. Arizona's largest and richest agricultural district, the Salt River Valley, is irrigated by water stored in a series of large dams on the Salt River. It is one of the very few successful government-financed irrigation projects at a reasonable cost and, at the same time, it is amortizing the heavy investment which was made in the construction of the dams and related works. An important factor in the success of this project has been the income derived from the sale of excess power to mines in central and eastern Arizona. Power sales to the mining companies from this project in 1944 amounted to 205,289,617 k.w.h. and produced a revenue of \$1,374,422.35.

A summary of the principal expenditures made by the leading copper producers in Arizona during the two years which are representative of wartime and peacetime conditions is shown in the following table:

	1938		1945	
	<u>EXPENDITURES</u>		<u>EXPENDITURES</u>	
	<u>In Arizona</u>	<u>Outside Arizona</u>	<u>In Arizona</u>	<u>Outside Arizona</u>
Wages & Salaries	\$12,938,000	\$ 202,000	\$24,104,545.94	\$ 398,322.37
Supplies & Equipment	2,599,000	6,016,000	4,112,393.21	9,326,656.27
Freight	1,362,000	3,331,000	1,554,997.92	6,094,782.29
Taxes	2,827,000	1,567,000	3,143,959.05	12,125,802.54
Refining & Selling	- - -	3,330,000	- - -	7,639,003.69
Miscellaneous	<u>1,864,000</u>	<u>3,678,000</u>	<u>7,268,872.37</u>	<u>7,873,281.21</u>
TOTAL	\$21,590,000	\$18,124,000	\$40,184,768.49	\$43,457,848.37

The above figures were compiled from replies to questionnaires sent to the major copper producers in Arizona. Five companies are represented in the figures for 1938, while the 1945 data cover 5 additional producers. Due to the differences in accounting systems, certain items in the breakdown of expenditures are estimated figures, but they are close approximations, and for the purpose of comparison may be considered factual. Expenditures for electrical power, mentioned in the previous paragraph, and for natural gas, are included in the miscellaneous items. The tax figures are subject to further break-down because the "outside Arizona" figures include all federal taxes.

#### GENERAL CONCLUSION

It is obvious that copper mining is a very important and complex business, and that in the production of refined copper many other industries are benefited. Most of such industries are outside of Arizona; consequently, communities other than the mining districts are vitally affected.

If, therefore, the copper mines are forced to close down because low-cost foreign copper is being dumped on the American market, the economic loss is widespread.

Because of the excise tax on foreign copper, enacted in 1932, the copper mines of this country were in position to fulfill the huge production obligations imposed by World War II. The protection given by that tax had brought the industry out of the dark depression days of 1931 and 1932 and made possible such projects as the huge Morenci open-pit mine.

Mines do not have unlimited life. Each ton of ore removed means another step toward inevitable exhaustion of the ore body. And to find new mines, and bring them into production, is not alone a costly venture in money and time, but is likewise a hazardous one.

The increasing importance of copper may be visualized from the following:

In 1800 the world produced 110 tons of iron for each ton of copper; in 1940, the ratio was 44 tons of iron for each ton of copper. Since about 1893, when the modern Copper Age (electricity, etc.) began, the United States has produced in dollars:

62 per cent as much in copper as iron

78 per cent as much in copper as the world has produced in silver in 443 years; and half again as much in copper as the Rand has produced in gold.

It cannot logically be said that the excise tax, or import duty, will raise the domestic price beyond any reasonable figure. This is due to the great quantity and low cost of some of the copper substitutes, notably aluminum. Aluminum is available as of this date for an estimated 100 years. It is much lighter than copper and has already seriously invaded the electrical industry.

It can be stated truthfully that a copper tariff actually creates natural resources. It makes possible the mining of rock with small copper content and the creation of new wealth, whereas, without tariff protection such rock must be left in the earth and its wealth (copper) lost forever.

Mining still affords opportunities for pioneering; for new enterprises, and production of new wealth. But its manifest hazards and handicaps are now almost overwhelming. It takes courage, faith, technical skill, plus capital, to develop a producing mine from a prospect - and all mines however great were once prospects.

Operators of small copper mines and prospects will find it very difficult, if not impossible, to secure venture capital for development and exploration if the excise tax is reduced.

At this crucial time in our national life, the major problem facing the nation is to KEEP MEN WORKING and secure PRODUCTION OF VITALLY NEEDED MATERIALS. No harm can result from keeping American workmen on their jobs at high wages, and keeping them in their own homes, rather than force them by the iron law of necessity to compete for other jobs (and homes) elsewhere.

National security demands continuation of the 4-cent excise tax on copper to give full protection for the domestic copper mining industry.



State of Arizona     )  
                          ) ss.  
County of Maricopa )

Sidney P. Osborn, Governor of Arizona, Sam H. Morris and Lin B. Orme, Chairman and Secretary, respectively, of the Arizona Copper Tariff Board, being by me first duly sworn, each for himself and not one for the other, deposes and says:

That he is a citizen of the United States of America, over the age of twenty-one and is a member of the Arizona Copper Tariff Board; that he has read the foregoing brief filed on behalf of the people of the State of Arizona in opposition to any reciprocal trade agreement with any foreign country, which might reduce the existing 4-cent excise tax on foreign copper; that the statements therein made are true to the best information and belief of deponent; and that the sources from which figures and material are taken are deemed by deponent to be reliable and trustworthy.

Arizona Copper Tariff Board  
created by act of the Legislature  
of the State of Arizona in 1933.

SAM H. MORRIS, Chairman  
Globe, Arizona

LIN B. ORME, Secretary  
Phoenix, Arizona

EDWARD G. DENTZER  
Greer, Arizona

CHARLES R. KUZELL  
Douglas, Arizona

MARK GEMMILL  
Prescott, Arizona

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SIDNEY P. OSBORN, Governor  
State of Arizona

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SAM H. MORRIS, Chairman  
Arizona Copper Tariff Board

---

LIN B. ORME, Secretary  
Arizona Copper Tariff Board

Subscribed and sworn to before me this sixteenth day of December, 1946.

(NOTARIAL SEAL)

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Notary Public