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UNITED STATES TARIFF COMMISSION

UNWROUGHT ZINC

Report to the President on Investigation No. TEA-W-111
Under Section 301(c)(2) of the
Trade Expansion Act of 1962



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C O N T E N T S

	<u>Page</u>
Report to the President-----	1
Finding of the Commission-----	2
Considerations supporting the Commission's finding-----	3
Information obtained in the investigation:	
Description and uses-----	A-1
U.S. tariff treatment-----	A-4
U.S. producers-----	A-7
U.S. consumption-----	A-9
U.S. production, stocks, and exports-----	A-10
U.S. imports-----	A-12
Prices-----	A-13
American Zinc Co.:	
The corporation-----	A-15
The Dumas, Tex., plant-----	A-16
Production and shipments-----	***
Employment-----	A-18
Prices-----	***
Appendix A. Statistical appendix-----	A-20
Appendix B. American Zinc Co.'s letter to the stockholders, recent press articles-----	A-28

Appendix Tables

1. Slab zinc (unwrought zinc, except alloyed): U.S. production, imports for consumption, exports of domestic merchandise, and consumption, 1966-70 and January-June 1971-----	A-21
2. Slab zinc (unwrought zinc, except alloyed): U.S. production, 1966-70-----	A-22
3. Slab zinc (unwrought zinc, except alloyed): U.S. production, total and by methods of reduction, 1966-70-----	A-22
4. Slab zinc (unwrought zinc, except alloyed): Stocks held by U.S. producers and consumers on Dec. 31 of 1965-70 and June 30, 1971-----	A-23
5. Slab zinc (unwrought zinc, except alloyed): U.S. exports of domestic merchandise, by principal markets, 1966-70 and January-June 1971-----	A-24

C O N T E N T S

Appendix Tables

	<u>Page</u>
6. Slab zinc (unwrought zinc, except alloyed): U.S. imports for consumption, 1930-70 and January-June 1971-----	A-25
7. Slab zinc (unwrought zinc, except alloyed): U.S. imports for consumption, by principal sources, 1966-70 and January-June 1971-----	A-26
8. Prime Western zinc: Average market prices, f.o.b. East St. Louis, 1964-70, and delivered to customer, 1971-----	A-27
9. Slab zinc (unwrought zinc, except alloyed): Production shipments and stocks at the Dumas, Texas plant of American Zinc Company, 1966-70 and quarterly, January-September 1971-----	***
10. Dumas, Texas plant: Average number of employees and total man-hours worked, 1966-70 and January-July 1971-----	***

REPORT TO THE PRESIDENT

U.S. Tariff Commission,
November 1, 1971.

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (76 Stat. 885), the U.S. Tariff Commission herein reports the findings of an investigation made under section 301(c)(2) of the act in response to a petition filed on behalf of a group of workers.

On September 1, 1971, the Tariff Commission received a petition from the United Steelworkers of America for a determination of eligibility to apply for adjustment assistance on behalf of the former workers of the Dumas, Tex., plant of the American Zinc Company, a partly owned subsidiary of Consolidated Gold Fields Ltd. The Commission instituted the investigation (No. TEA-W-111) on September 28, 1971, to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with the unwrought zinc produced by the American Zinc Co. at Dumas, Tex., are being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of the Dumas plant. The workers involved were occupied in the conversion, by smelting, of zinc ore and concentrates to zinc metal for sale.

Public notice of the investigation was given by posting copies of the notice at the office of the Commission in Washington, D.C., at the New York City office, and by publication in the Federal Register of October 5, 1971 (36 F.R.19424). No public hearing was requested and none was held.

The information herein was obtained from the United Steelworkers of America and its Local Union No. 4289, from the American Zinc Co., from trade associations, and from the Commission's files.

Finding of the Commission

On the basis of its investigation, the Commission finds unani-
mously that articles like or directly competitive with the unwrought
zinc produced at the Dumas, Texas, plant of the American Zinc Co.
are not, as a result in major part of concessions granted under trade
agreements, being imported into the United States in such increased
quantities as to cause, or threaten to cause, the unemployment or
underemployment of a significant number or proportion of the workers
of such plant.

Considerations Supporting the Commission's Finding

On September 1, 1971, the United Steelworkers of America filed a petition for adjustment assistance under section 301(a)(2) of the Trade Expansion Act of 1962 on behalf of former workers who had produced slab zinc ^{1/} at the Dumas, Tex., plant of the American Zinc Co. Prime Western grade slab zinc was produced at the Dumas plant until August 4, 1971, when the operation was terminated by the closing of the plant. The American Zinc Co. no longer has any smelters or mines in production, all having been closed, sold, optioned to potential buyers, or placed on the market for sale.

The Tariff Commission has frequently stated that the Trade Expansion Act of 1962 establishes four criteria to be met in order for an affirmative determination to be made. Those criteria are as follows:

- (1) Articles like or directly competitive with those produced by the workers concerned must be imported in increased quantities;
- (2) The increased imports must be a result in major part of concessions granted under trade agreements;
- (3) The workers concerned must be unemployed or underemployed, or threatened with unemployment or underemployment; and
- (4) The increased imports resulting from trade-agreement concessions must be the major factor causing or threatening to cause the unemployment or underemployment.

^{1/} Unwrought zinc, for the purposes of this report, referred to as slab zinc.

If any one of the above criteria is not met in a given case, the Commission must make a negative determination. In the Commission's judgment, the fourth criterion has not been met in the case at hand, and therefore, the Commission has made a negative determination. Under the circumstances, the Commission has not been required to reach a conclusion respecting the first three criteria, and it has not done so.

The American Zinc Co. plant at Dumas, Tex., in which slab zinc of Prime Western grade was produced, was built in 1937; the basic smelting operation has remained unchanged since that time. Much of the heavy equipment therein is over 20 years old. * * *. The apparent stability of the Dumas plant probably reflects in some measure the demise of certain other zinc-producing facilities in the United States. Further, annual production at the Dumas plant was highest during the same years--1968 and 1969--when imports were at their highest. Production and employment did not decline significantly until after a decision was made by management to close the Dumas plant, as well as the other operating facilities of the company.

The fact that expansion or modernization investments were not made at the Dumas plant is recognized as a management prerogative, based on circumstances and information known to the American Zinc Co., which would in the long run prove fatal to the Dumas plant. The factors considered included (1) the difficulty of metallurgical control and the capability of producing only low-grade slab zinc, plus the lack of economies of operation with the horizontal-type retort; (2) pollution

control and its inherent high costs and inevitably difficult technical adaptation to the existing equipment at the Dumas plant; (3) the potential loss, in the near future, of raw material (zinc concentrate) to new smelters being constructed in closer proximity to the mines in Mexico and Canada, plus the possibly higher price for concentrate in the world market as more foreign smelters vie for needed raw materials; (4) the potential cost increase and/or loss of natural gas to fire the retort furnaces, before or upon expiration of the contract with the supplier, because of a decline in available resources of natural gas; and (5) the cost-price squeeze in the U.S. market.

The many economic factors operating at the Dumas plant culminated with the financial decline of the American Zinc Co. as a whole, as witnessed by the increasing losses incurred by the company in 1967 through 1970, and with the subsequent determination by the directors of the American Zinc Co. to cease operation of its mines and plants and sell these assets rather than continue to operate in the face of mounting losses. * * *

In view of the foregoing, it is the opinion of the Commission that any increased imports resulting from trade-agreement concessions were not the major factor in causing or threatening to cause the unemployment or underemployment in the Dumas, Tex., plant of the American Zinc Co. Since the criteria established by the Trade Expansion Act of 1962 have not all been fully satisfied, the Commission, must make a negative determination.

INFORMATION OBTAINED IN THE INVESTIGATION

Description and Uses

For tariff purposes, the term "unwrought" refers to metals, whether or not refined, in the form of ingots, blocks, lumps, billets, cakes, slabs, pigs, cathodes, anodes, briquettes, cubes, sticks, grains, sponge, pellets, shot, and similar primary forms, but does not cover rolled, forged, drawn, or extruded products, tubular products, or cast or sintered forms which have been machined or processed otherwise than by simple trimming, scalping, or descaling. Slabs, typically weighing about 55 pounds, are the most common form of unwrought zinc in trade; zinc blocks, many times larger, are much less common. In this report, therefore, the term "slab" will refer to zinc in its unwrought forms, unalloyed, and of a kind provided for in item 626.02 of the Tariff Schedules of the United States (TSUS).

The most important source of zinc metal is ore, which frequently contains other metals such as lead, copper, silver, gold, and cadmium; in the smelter trade, these are frequently referred to as pay metals. Zinc ores used in the United States are of both domestic and foreign origin and are principally sulfide-type ores known as Sphalerite. Zinc also occurs in oxide ores such as Zincite. Zinc ore is usually concentrated at or near the mine before being sold or smelted; the resulting concentrate generally contains from 40 to slightly over 60 percent zinc. Zinc is recovered as metal either by distillation in retort furnaces or by an electrolytic process. As the first step in either

process, the zinc concentrate is roasted to eliminate sulfur and convert the sulfide to zinc oxide with minor quantities of zinc sulfate.

At electrolytic zinc plants the roasted zinc concentrate is leached with sulfuric acid solution. The pregnant solution is then purified to remove contained copper, cadmium, cobalt, iron, and so forth, and piped to electrolytic cells, where the zinc is electrodeposited on aluminum cathodes. At intervals the cathodes are lifted from the tanks and stripped of the zinc, which is then melted in a furnace and cast into slab form.

Distillation-retort plants are classified as batch horizontal retorts, continuous vertical retorts fired by fuel, and continuous vertical retorts heated electrothermally. All employ coal or coke as a reducing agent, quantities required varying from about 0.5 ton to 1 ton per ton of slab zinc output. The zinc vapor and hot reducing carbon monoxide from the retorts pass into condensers of various types where the zinc is collected as liquid metal ready for casting into slab form.

Zinc is also obtained by remelting and refining scrap by redistilling waste, scrap, dross, skimmings, and fume. This zinc, called secondary zinc, is recovered mainly as a metal constituent of alloys and also as a constituent of chemical products.

Slab zinc contains 98 percent or more zinc and is marketed in a number of grades based on the zinc content. Standard grades of zinc, in descending order of purity, are Special High, High, Intermediate, Brass Special, and Prime Western. Prime Western grade, the grade produced at the Dumas plant of the American Zinc Co. is about 98.3

percent zinc, with lead, copper, and numerous miniscule tramp elements completing the content. Low-grade zinc with its inherent tramp elements helps to make the galvanizing process work: the tramp elements act as low-energy nuclei for crystal nucleation and growth. The electrolytic process usually results in zinc of Special High grade or High grade. The slab zinc produced by the horizontal retort process is largely Prime Western grade; purities much above 98.32 percent in existing commercial horizontal zinc smelters are not economically feasible owing to the unsophisticated equipment, long process-cycle time, and high labor content; however, the product can be upgraded to some extent by a redistillation process. The vertical retort process results preponderantly in zinc of Special High grade or High grade.

The largest use of zinc in recent years has been in zinc-base alloys for die castings. Zinc die castings are used extensively by the automotive industry for hardware and for parts of pumps, carburetors, and the like; such castings are also used for parts of business machines, and electrical appliances, and in a variety of other articles. Almost all of the zinc used for this purpose is Special High grade. Another major use of zinc is in galvanizing steel in order to increase its resistance to rust and corrosion; the great bulk of the zinc used for galvanizing is of Prime Western grade, but a considerable tonnage of each of the other grades is also used in this way. Zinc (principally High grade, Special High grade, and Prime Western grade) is also used in substantial quantities in the production of brass and bronze, alloys of copper in which zinc is a subordinate metal. Other uses are in

rolled-zinc products (photoengraving and other plate, sheet, strip, rod, and wire), and zinc oxide, used as a white pigment and for other purposes.

Zinc has many competitors in the marketplace, but slab zinc, Prime Western grade, is especially vulnerable to plastics and aluminum. Today, many standard items, such as galvanized steel pails and boat fittings, have nearly been replaced by plastics and aluminum. These materials are generally easier to work, more attractive in appearance to the consumer, and, as regards plastics, less costly to produce.

U.S. Tariff Treatment

Slab zinc was originally classified for tariff purposes under paragraph 394 of the Tariff Act of 1930. The provisions for slab zinc were not significantly changed with the adoption of the TSUS in 1963, and no change in rate occurred. The current rate applicable to slab zinc (0.7 cent per pound) has been in effect since 1951, as shown in the following table.

Slab zinc: U.S. rates of duty applicable under TSUS item 626.02,
June 18, 1930-Oct. 31, 1971

Effective date	Rate of duty	Authority
	:Cents per pound:	
June 18, 1930-----	1.75	: Tariff Act of 1930
Jan. 1, 1939-----	1.4	: Trade agreement, Canada
Jan. 30, 1943-----	.875	: Trade agreement, Mexico
Jan. 1, 1948-----	.875	: GATT <u>1/</u>
June 6, 1951-----	.7	: GATT <u>1/</u>
Aug. 31, 1963-----	.7	: Tariff Classification Act of 1962.

1/ General Agreement on Tariffs and Trade.

The ad valorem equivalents of the specific rates of duty applicable to slab zinc in 1930, computed on the basis of imports in each of the years 1930 and 1970, were 38.7 and 12.4 percent, respectively; those applicable in 1970, computed on the same basis, were 15.5 and 4.9 percent.

From the preceding rate history and ad-valorem-equivalent data, it is evident that in addition to reductions in the specific rates through trade-agreement negotiations, the incidence of protection of the rates has declined because of the higher value of slab zinc in 1970 as compared with 1930. While the specific rate applicable to slab zinc has been reduced by 60 percent, the ad valorem equivalent (or the effective incidence of protection) has declined 87 percent.

Presidential Proclamation 4074 of August 15, 1971, imposed, effective August 16, 1971, an additional duty of 10 percent ad valorem on articles which are not free of duty under the Tariff Schedules of the United States and which are the subject of tariff concessions granted by the United States in trade agreements. This duty applies in addition to the duties otherwise imposed on slab zinc. However, in no event may the addition of the 10-percent duty to the column 1 (concession) rate result in an aggregated rate in excess of the column 2 (statutory) rate. Based on the average value of imports of slab zinc during January-July 1971 (13.79 cents per pound), the column 2 rate (1.75 cents per pound) currently applies to imports of slab zinc. Should imports be valued at less than 10.5 cents per pound during the course of the applicability of this surcharge, the full 10 percent ad valorem additional duty will take effect.

Quarterly quotas on zinc were in effect in the United States during 1958-65. These quotas were imposed by Presidential Proclamation 3257, dated September 22, 1958, following the Tariff Commission's escape-clause investigation of April 1958; the quota became effective October 1, 1958. On an annual basis, the quota restricted the imports of slab zinc, including zinc waste and scrap, to a total of 141,120 tons. Subsequent to the Commission's investigation and report to the President in June 1965, the quota was terminated by Presidential Proclamation 3863, effective November 21, 1965.

Two bills are currently pending before the Committee on Ways and Means of the House of Representatives that would, under certain circumstances, impose additional import restrictions on lead and zinc; one provides for absolute quotas and the other, for increased import duties. Insofar as zinc is concerned, H.R. 2619 provides for quarterly quotas of not less than 130,000 tons of zinc (80 percent of which is to be allocated to zinc in ore) when monthend total producers' stocks for 3 consecutive months exceed 175 percent of the average monthly producers' shipments of slab zinc for the same 3 months. 1/ H.R. 8587 provides that when either (1) the delivered price of Prime Western grade zinc metal falls below 15 cents per pound or (2) imports of zinc in ore, unwrought forms, or waste and scrap exceed 120,000 tons in any quarterly period, the import duty applicable to slab zinc will be increased from 0.7 cent per pound to 19 percent ad valorem.

1/ A bill similar to H.R. 2619 has been introduced in each Congress since 1967; not one has been reported out by the committee.

U.S. Producers

At the beginning of 1971, the primary slab-zinc industry of the United States comprised nine companies operating 12 smelters with a total rated annual capacity of nearly 1.2 million short tons of zinc, as shown in the table below.

Slab zinc: Primary smelters in the United States and their annual capacity, January 1971

Type of plant and producer	Plant location	Slab zinc annual capacity in January 1971 1,000 short tons
Electrolytic plants:		
American Smelting and Refining Co.	:Corpus Christi, Tex.	:)
American Zinc Co.-----	:Sauget, Ill. <u>1/</u>	:)
The Anaconda Co.-----	:Great Falls, Mont.	:)
The Bunker Hill Co.-----	:Kellogg, Idaho	:)
Horizontal-retort plants:		
American Smelting and Refining Co.	:Amarillo, Tex.	:)
American Zinc Co.-----	:Dumas, Tex. <u>1/</u>	:)
Amax Corp.-----	:Blackwell, Okla.	:)
National Zinc Co.-----	:Bartlesville, Okla.	:)
Vertical-retort plants:		
Matthiessen & Hegeler Zinc Co.	:Meadowbrook, W. Va. <u>1/</u>	:)
New Jersey Zinc Co.-----	:Depue, Ill. <u>1/</u>	:)
Do-----	:Palmerton, Pa.	:)
St. Joe Minerals Corp.	:Josephtown, Pa.	:)

1/ Closed during the first 8 months of 1971.

Source: U.S. Department of the Interior.

As indicated in the preceding table, four primary zinc smelters were closed during the first 8 months of 1971; these plants accounted for about 22 percent of annual capacity at the beginning of the year. In addition, two other primary zinc smelters were closed in recent years: the Henryetta, Okla., horizontal-retort plant of Eagle-Picher Industries was closed in 1968, and the Anaconda, Mont., electrolytic plant of the Anaconda Co. was closed in 1969.

Secondary slab zinc is produced by about 12 companies operating 13 plants in nine States; total annual capacity of these plants is about 54,000 tons.

The decline in smelter capacity in the United States is in contrast to the expansion of zinc smelter capacity in other countries (see news clippings in appendix B). A new zinc smelter recently began operation in Finland, and construction of new plants is underway in Canada and Mexico. A second smelter is on the drawing boards for Mexico by a Mexican subsidiary partly owned by American Smelting and Refining Co., which operates the horizontal-retort smelter at Amarillo, Tex. A new electrolytic zinc smelter is scheduled to begin production in Belgium in 1974. As a result, the U.S. smelter industry will meet increased competition in purchasing zinc ore for its operations. During the period 1965-69, 40 to 52 percent of U.S. slab-zinc production has been from foreign ore.

It has been reported that other U.S. zinc smelters will be closed in the future owing to increasingly rigid clean-air requirements, spiraling costs, and other reasons.

U.S. Consumption

Consumption of slab zinc in the United States during 1966-70 fluctuated moderately and averaged about 1.3 million tons annually. A projection of the January-June slab-zinc consumption indicates that approximately 1.3 million tons of slab zinc will be consumed domestically in 1971. The greatest consumption during the period occurred in 1966 (1.41 million tons) and 1969 (1.37 million tons) (table 1).

The production of zinc-base alloys (principally for die casting) and galvanizing account for three-fourths or more of annual domestic usage of slab zinc. The following table shows consumption of slab zinc in 1969 by end-use industry classification.

Slab zinc: U.S. consumption by end-use industry, 1969

Industry	Consumption	Percent of total
	: 1,000 short tons :	
Zinc-base alloys-----	576 :	42
Galvanizing-----	476 :	35
Brass and bronze-----	179 :	13
Rolled zinc-----	49 :	4
Zinc oxide-----	41 :	3
Other-----	47 :	3
Total-----	1,368 :	100

Source: Official statistics of the U.S. Department of the Interior.

Annual consumption of Prime Western zinc, the grade produced at the Dumas plant, ranged from 355,000 tons to 398,000 tons during 1966-70. This grade normally represents about 25 to 30 percent of total annual consumption of zinc, as shown in the following table.

Slab zinc: U.S. consumption, by grade, 1969

Grade	Consumption	Percent of total
	1,000 short tons:	
Special High Grade-----	691	51
Prime Western-----	398	29
High Grade-----	138	10
Brass Special-----	128	9
Intermediate-----	8	1
Remelt-----	5	1/
Total-----	1,368	100

1/ Less than 0.5 percent.

Source: Official statistics of the U.S. Department of the Interior.

U.S. Production, Stocks, and Exports

Annual production of slab zinc in the United States averaged 1 million tons during the period 1966-70; during the first 6 months of 1971, production was at an annual rate of slightly less than 1 million tons (table 1). U.S. production of slab zinc from foreign ores increased from about 45 percent of total production in 1966 to 52 percent in 1969, whereas production of slab zinc from domestic ores declined from 47 to 42 percent and that from secondary sources, from 8 to 6 percent (table 2). In 1970, foreign ores accounted for 50 percent, domestic ores for 42 percent, and secondary sources for 8 percent of U.S. slab-zinc output.

Production of slab zinc in the United States by the distillation process (horizontal- and vertical-retort plants) has always been greater than that by the electrolytic process. Table 3 indicates that the distillation processes accounted for 51 to 57 percent of annual U.S. output of slab zinc during 1966-70.

Production of Prime Western slab zinc during 1966-70 averaged about 367,000 tons annually, and ranged from 31 to 37 percent of total yearly slab-zinc production.

In addition to the production of slab zinc discussed above, appreciable quantities of zinc are recovered from zinc-bearing alloys and chemical products. The recovery of this material contributes significantly to the total available zinc supply, and during 1966-69 averaged 277,000 tons annually.

Yearend producers' stocks of slab zinc, increased from about 29,000 tons at the end of 1965 (the final year of the import quota on zinc) to about 65,000 tons at the end of 1966 reflecting differences in production and shipments (table 4). These stocks fluctuated in the years 1967-69, increased sharply by the end of 1970 to about 98,000 tons, and then declined almost as abruptly in the early months of 1971.

Yearend consumers' stocks, which are normally higher than producers' stocks, tend to fluctuate in opposition to producers' stocks. Consumers' stocks of slab zinc tend to be higher when the price is favorable to buyers and lower when the price is less favorable. These stocks declined steadily during 1965-70; they increased markedly during January-June 1971.

Producers' and consumers' stocks on June 30, 1971, in the aggregate, were roughly equivalent to average yearend stocks over the past several years.

Exports of slab zinc during 1966-70 have been small, ranging from less than one-tenth of 1 percent to 3 percent of production (table 5). A major part of the exports in 1967-69 were shipments to countries with active assistance programs under the Agency for International Development.

U.S. Imports

Imports of slab zinc, while relatively small in the early 1930's, have been substantial since the mid 1940's; in 1946 they exceeded 100,000 tons (table 6). Reported imports ranged between 120,000 and 164,000 tons annually during 1959-65, the years during which the absolute quota was in effect. Beginning in 1966, annual imports were substantially higher than during the quota years. They fluctuated widely, peaking at about 328,000 tons in 1969. Imports of slab zinc in 1970 were about 21 percent smaller than those in 1969; such imports during January-June 1971 were at an annual rate of about 276,000 tons. The decline in imports in 1970 was undoubtedly due in large part to the auto industries' poorest sales year since 1963 and the general recession in virtually all industrial and consumer sectors. In recent years, imports of slab zinc supplied from 18 percent (in 1967) to 24 percent (in 1969) of total annual consumption in the United States (table 1).

Canada is by far the major supplier of imports of slab zinc, and has ranked as the number one source since 1946. During 1966-70, Canadian imports accounted for about 43 percent of the aggregate

quantity of imports during the period; Japan, Peru, and Australia provided 14, 13, and 8 percent, respectively (table 7).

Data on imports of slab zinc are not collected or reported by grade, i.e., Prime Western, Special High, and so forth. However, on the basis of the Department of Interior data on production by grade and on consumption by grade, it would appear that most of the imports consist of slab zinc of Special High grade. Imports apparently account for the 200,000 tons or more by which reported annual consumption of Special High grade zinc exceeds reported U.S. production of such zinc.

Prices

Until January 1971 the U.S. producers' price for zinc of Prime Western grade was quoted f.o.b. East St. Louis. In January 1971 the East St. Louis base was dropped and domestic producers began quoting a price on a delivered basis. The U.S. producers' price for Prime Western zinc has varied considerably during the past several years in response to changes in the markets for zinc in the United States and other parts of the world. Changes in the U.S. producers' prices during 1964-71 are presented in table 8. The East St. Louis price for Prime Western zinc remained stable at 14.5 cents a pound from October 1964 until May 1967, when it was reduced to 13.5 cents. Thereafter, it increased irregularly to 17 cents, delivered, in July 1971, where it has remained. The price of 15 cents per pound shown in the table effective January 6, 1971, is a delivered price; this amounted to a reduction from the price effective previously.

The U.S. producers quote prices for the higher grades of zinc also; these prices include premiums (or charges) above the Prime Western grade. Typically, when the market is strong in relation to supply, buyers pay the prices including full premiums for the respective higher grades. On the other hand, when the market is relatively weak, the premiums are partly or wholly discounted; in similar situations, the price of Prime Western zinc also has been discounted.

Prices for zinc are quoted on the London Metals Exchange (LME) also, but the quantity of zinc traded on the LME accounts for a small portion of the total world trade in zinc. Before mid-1964, the LME price quotation was used as the basis for pricing the bulk of the free-world trade in zinc outside the United States. Beginning in mid-1964, most major foreign producers stopped using the LME price for this purpose; in its stead they established a foreign producers' fixed price. In contrast to the rather frequent and sometimes sharp fluctuations in the LME price, the foreign producers' price has generally remained stable over comparatively long periods of time.

As zinc is traded internationally, changes in the U.S. and foreign prices interact. For example, a rise in the price in foreign markets would perforce bring some rise in the U.S. producers' price, to allow certain U.S. producers to remain competitive in bidding for the available supply of concentrates. The more recent advances in the U.S. price of zinc are, in part, attributed by trade sources to strength in foreign markets and to restrictions in the domestic supply

of metal stemming from the closures of smelters and shutdowns resulting from labor-management disputes.

American Zinc Co.

The corporation

American Zinc Co. (formerly American Zinc, Lead and Smelting Co.) was incorporated in Maine in 1899 and maintains its headquarters in St. Louis, Mo. It owns mining properties, smelters, zinc oxide and sulfuric acid plants, and gravel and limestone quarries.

The company has had a long history of acquiring mining properties, of operating mines, ore mills, and smelters, and of constructing, expanding, and closing down facilities under changing business conditions, on a profitable basis. In 1965 the company showed a net income after taxes of \$3.5 million on sales of \$65 million. Net income dropped to \$3.2 million in 1966, and thereafter, while annual sales were maintained mostly above \$60 million, the company ran deficits of \$1.2 million in 1967, \$0.9 million in 1968, \$1.9 million in 1969, and \$2.4 million in 1970.

* * * * *

Consolidated Gold Fields Ltd. of London, England, entered into a joint venture with the American Zinc Co. in 1961 to develop zinc mining and milling properties in Tennessee and proceeded to acquire control of American Zinc in May 1963 via a tender which resulted in a 51-percent holding of American Zinc Co. common stock. By August 1970, Gold Fields had acquired 60 percent of the common stock of its partner.

During the interim, the British concern had tightened its relationship by guaranteeing \$7.8 million of American Zinc's notes and \$10 million in loans which will fall due during 1974.

* * *. In February 1971, American Zinc Co. announced a phaseout of the Dumas and Sauget smelters and the sale of its marketing organization to Texas Gulf Sulfur Co. In March 1971, agreement in principle was reached on the sale of all of the mining, milling, and oxide properties of American Zinc to the American Smelting & Refining Co. In August, American Metal Climax, Inc., was granted a 1-year purchase option on the Sauget smelter and is conducting a study to determine whether the smelter can be operated at a profit.

* * * * *

The Dumas, Tex., plant

The Dumas plant is a horizontal-gas-fired retort zinc-smelting operation with an annual rated capacity of 58,000 tons. The plant, with headquarters at the plant site, is situated on the open prairie some 4 miles north of Dumas, in the Panhandle area of Texas. In 1937, the Illinois Zinc Co. built the Dumas smelter to process ore mined in the Silver City area, near Deming, N. Mex. The Dumas plant was strategically located for inexpensive natural gas for power and on an inline rail route from mine to mill to smelter to steel industry in the Midwest. The American Zinc Co. mining and concentrating operations in New Mexico were shut down in 1967; thereafter 70 percent of the concentrate used at the Dumas plant came from Mexico,

and the remainder, for the most part, from Canada and Tennessee. Prime Western grade slab zinc was the major product and only grade of slab zinc produced at the Dumas plant. Cadmium sinter was recovered as a byproduct of the concentrate roasting operations * * *.

American Zinc Co. leased the plant in 1940 and obtained complete control of the facility in 1958 with the acquisition of the Defense Plant Corporation's equipment installed there during World War II.

The Dumas plant consists of a pottery plant, roaster-furnace complex, sinter furnace, rod mill and blending system, and eight standard blocks, each of which contains four horizontal retort-type furnaces for distillation of zinc metal. Appending offices and storage, maintenance, and waste-disposal areas are also on the plant grounds. * * *.

When the Commission's staff visited the Dumas plant, it was totally shut down and had not been operating since August 4, 1971; announcement of its closing had been made in February 1971. The entire operation is presently for sale, and professional plant auctioneers have been retained to sell the plant piecemeal at public auction should no buyer or buyers appear by the latter part of October 1971.

Considerable pressure has been brought to bear on polluting industries in Texas by the Texas Air Control Board (ACB), which considers the Dumas operation a prime offender. * * *

* * * * *

Slab zinc produced at the Dumas plant is shipped to all parts of the nation by rail; truck shipments are seldom, if ever, made, owing to cost and weight restrictions. In an effort to control and minimize costs, demurrage charges are kept to a minimum by the rapid loading of boxcars with lift trucks on their arrival and by removing them from the siding on the following day.

Other than natural gas and concentrate--which are delivered by rail and stored under cover near the roaster furnaces--the plant has few other major raw-material requirements. This is due in part to the nature of the process and the reclamation and reuse of ceramic materials in the pottery plant.

* * * * *

Employment .-- * * * * *

According to an official of local No. 4289 of the United Steelworkers, the work force at this plant had been relatively stable over the years, with lengths of employment of 16 to 20 years common. The average age of the hourly employee was 47 years, and the average education was through the sixth grade. Unemployment in Moore County (in which Dumas is located) was 7.2 percent on October 4, 1971. About 30 percent of the former Dumas employees have left the area, 60 percent are receiving unemployment benefits of \$45.00 per week, and 10 percent have found various types of employment. The United Steelworkers have attempted to find employment for the former Dumas workers throughout the country, but, with about 300,000 members

unemployed nationally at present, little progress has been made. The union did place a few workers in a similar zinc smelter at Amarillo. * * *

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* * * * *



APPENDIX A

STATISTICAL APPENDIX

Table 1.--Slab zinc (unwrought zinc, except alloyed): U.S. production, imports for consumption, exports of domestic merchandise, and consumption, 1966-70 and January-June 1971

Period	Production	Imports	Exports	Consumption	Ratio of imports to consumption
	<u>Short tons</u>	<u>Short tons</u>	<u>Short tons</u>	<u>Short tons</u>	<u>Percent</u>
1966-----	1,108,329	280,307	1,406	1,410,197	19.9
1967-----	1,012,335	222,002	16,809	1,236,808	18.0
1968-----	1,100,756	306,651	33,011	1,333,699	23.0
1969-----	1,111,150	327,849	9,298	1,368,323	24.0
1970-----	954,967	260,132	288	1,186,951	21.9
1971 (Jan.- June)-----	470,876	137,848	8,507	650,162	21.2

Source: Production and consumption, compiled from official statistics of the U.S. Department of the Interior; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Slab zinc (unwrought zinc, except alloyed):
U.S. production, 1966-70

(In short tons)					
Year	Primary			Secondary	Grand total
	From domestic ores	From foreign ores	Total		
1966----	523,580	501,486	1,025,066	83,263	1,108,329
1967----	438,553	500,277	938,830	73,505	1,012,335
1968----	499,491	521,400	1,020,891	79,865	1,100,756
1969----	458,754	581,843	1,040,597	70,553	1,111,150
1970----	403,953	473,858	877,811	77,156	954,967

Source: Compiled from official statistics of the U.S. Department of the Interior.

Table 3.--Slab zinc (unwrought zinc, except alloyed): U.S. production, total and by methods of reduction, 1966-70

(In short tons)				
Year	Electrolytic	Distillation	Secondary	Total
1966-----	433,576	591,490	83,263	1,108,329
1967-----	371,267	567,563	73,505	1,012,335
1968-----	398,265	622,626	79,865	1,100,756
1969-----	453,539	587,058	70,553	1,111,150
1970-----	393,280	484,531	77,156	954,967

Source: Compiled from official statistics of the U.S. Department of the Interior.

Table 4.--Slab zinc (unwrought zinc, except alloyed): Stocks held by U.S. producers and consumers on Dec. 31 of 1965-70 and June 30, 1971

(In short tons)

Date	Type of plant		Total
	Producers	Consumers	
Dec. 31--			
1965-----	28,622	150,763	179,385
1966-----	64,798	129,593	194,391
1967-----	81,916	102,535	184,451
1968-----	65,379	101,818	167,197
1969-----	67,662	100,492	168,154
1970-----	98,314	89,551	187,865
June 30, 1971-----	68,537	109,275	177,812

Source: Compiled from official statistics of the U.S. Department of the Interior.

Table 5.--Slab zinc (unwrought zinc, except alloyed): U.S. exports of domestic merchandise, by principal markets, 1966-70 and January-June 1971

Market	1966	1967	1968	1969	1970	Jan.-June 1971
Quantity (short tons)						
Canada-----	191	1,198	326	670	69	173
Spain-----	47	25	-	-	41	41
Venezuela-----	512	148	7	26	33	-
Chile-----	69	142	130	69	29	-
Liberia-----	-	2	-	3	21	6
Honduras-----	<u>1/</u>	-	-	13	20	5
United Kingdom--	2	-	1	-	15	8,270
India-----	4	13,724	32,345	8,409	-	-
All other-----	581	1,570	202	108	60	12
Total-----	1,406	16,809	33,011	9,298	288	8,507
Value (1,000 dollars)						
Canada-----	212	530	165	191	34	45
Spain-----	30	15	-	-	7	7
Venezuela-----	226	81	4	9	12	-
Chile-----	30	59	46	22	10	-
Liberia-----	-	1	-	1	9	2
Honduras-----	<u>2/</u>	-	-	5	8	2
United Kingdom--	2	-	1	-	16	1,240
India-----	2	3,122	9,507	2,337	-	-
All other-----	247	479	74	47	18	9
Total-----	749	4,287	9,797	2,612	114	1,305

1/ Less than 1,000 pounds.

2/ Less than \$500.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 6.--Slab zinc (unwrought zinc, except alloyed): U.S. imports for consumption, 1930-70 and January-June 1971

(In short tons)

Period	Quantity	Period	Quantity
1930 <u>1/</u> -----	281	1951 <u>4/</u> -----	88,043
1931-----	274	1952-----	113,053
1932-----	310	1953-----	227,654
1933-----	1,890	1954-----	161,288
1934-----	1,725	1955-----	195,839
1935-----	4,444	1956-----	244,726
1936-----	11,660	1957-----	268,824
1937-----	37,369	1958 <u>5/</u> -----	185,693
1938-----	7,580	1959 <u>5/</u> -----	164,463
1939 <u>2/</u> -----	31,112	1960 <u>5/</u> -----	120,925
1940-----	10,146	1961 <u>5/</u> -----	125,186
1941-----	40,288	1962 <u>5/</u> -----	135,995
1942-----	36,352	1963 <u>5/</u> -----	132,332
1943 <u>3/</u> -----	56,155	1964 <u>5/</u> -----	134,122
1944-----	63,626	1965 <u>5/</u> -----	153,957
1945-----	96,760	1966-----	280,307
1946-----	104,065	1967-----	222,002
1947-----	72,063	1968-----	306,651
1948-----	92,495	1969-----	327,849
1949-----	125,564	1970-----	260,132
1950-----	155,332	1971 (Jan.-June)---	137,848

1/ Import duty of 1.75 cents per pound established on June 18.

2/ Duty reduced, effective Jan. 1, to 1.4 cents per pound.

3/ Duty reduced, effective Jan. 30, to 0.875 cent per pound.

4/ Duty reduced, effective June 6, to 0.7 cent per pound.

5/ Import quota in effect on unmanufactured zinc during part or all of the year.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 7.--Slab zinc (unwrought zinc, except alloyed): U.S. imports for consumption, by principal sources, 1966-70 and January-June 1971

Source	1966	1967	1968	1969	1970	Jan.-June 1971
Quantity (short tons)						
Canada-----	116,758	80,482	118,701	151,895	120,611	65,251
Australia-----	27,007	7,187	19,915	34,237	30,335	15,349
Peru-----	30,854	33,568	53,729	30,204	31,862	11,146
Japan-----	21,712	41,621	45,735	52,502	32,525	6,807
Belgium-						
Luxembourg-----	27,469	15,989	16,611	16,361	14,371	1,335
All other-----	56,507	43,155	51,960	42,650	30,428	37,960
Total-----	280,307	222,002	306,651	327,849	260,132	137,848
Value (1,000 dollars)						
Canada-----	32,588	21,791	30,439	40,042	34,329	17,442
Australia-----	7,583	1,703	4,627	8,896	9,359	4,574
Peru-----	8,568	8,873	13,655	8,201	9,126	3,159
Japan-----	5,818	10,483	11,115	13,239	8,764	1,782
Belgium-						
Luxembourg-----	7,012	4,016	4,109	4,226	3,876	341
All other-----	14,055	10,665	12,090	10,493	8,241	10,225
Total-----	75,624	57,531	76,035	85,097	73,695	37,523

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 8.--Prime Western zinc: Average market prices, f.o.b.
East St. Louis, 1964-70, and delivered to customer, 1971

(In cents per pound)

Date of change	New price	Date of change	New price
1964:		1969--Con.	
Jan. 28-----	13.25	May 1-----	14.50
Feb. 3-----	13.00	Sept. 2-----	14.50-15.50
Apr. 9-----	13.25	Sept. 12-----	15.50
Apr. 13-----	13.50	1970:	
Oct. 14-----	14.00	Aug. 20-----	15.00-15.50
Oct. 21-----	14.50	Aug. 24-----	15.00
1967:		1971: <u>1/</u>	
May 1-----	13.75-14.50	Jan. 6-----	15.00
May 2-----	13.50-13.75	Mar. 22-----	15.00-15.50
June 20-----	13.50	Mar. 23-----	15.50
1969:		May 11-----	15.50-16.00
Jan. 10-----	13.50-14.00	May 14-----	16.00
Jan. 14-----	14.00	July 26-----	17.00
Apr. 29-----	14.00-14.50		

1/ Basis of quotation changed from "f.o.b. East St. Louis" to "delivered" early in January 1971.

Source: American Metal Market.

APPENDIX B

AMERICAN ZINC CO.'S LETTER TO THE STOCKHOLDERS,
RECENT PRESS ARTICLES

AMERICAN ZINC COMPANY

October 12, 1971

To the Stockholders of
AMERICAN ZINC COMPANY:

The Board of Directors of American Zinc Company has called a special meeting of stockholders to be held at the offices of the Company, 20 South Fourth Street, St. Louis, Missouri, on November 10, 1971, at 10:00 A.M. (Central Standard Time), at which two proposals of particular importance to all stockholders will be considered.

As more fully described in the accompanying Notice of Special Meeting and Proxy Statement, which you are strongly urged to read, the stockholders will be asked to approve a proposal to sell to American Smelting and Refining Company ("Asarco") all of the Company's mining and milling properties in Tennessee, its two zinc oxide plants located in Hillsboro, Illinois and Columbus, Ohio, and all of the properties comprising its stone division. The Management anticipates that the net proceeds to be received by the Company from the proposed sale will be approximately \$23,078,000 consisting of \$7,859,000 in cash and \$15,219,000 in 6% promissory notes of Asarco. If the proposed sale is consummated, the proceeds received by the Company at the Closing will be used towards the settlement of its debts, and, accordingly, no distribution to the stockholders will be made from such proceeds. In addition, as more fully described in the Proxy Statement, the purchase price may be increased by payments over the five years following the sale contingent on the price of zinc and on the level of zinc concentrate production during that period. It is the present intention of Management to continue the corporate existence of the Company to receive any such contingent payments and to investigate ways of developing and utilizing the Company's remaining assets to its best advantage.

In addition to the proposed sale of its mining and milling properties, oxide plants, and stone division to Asarco, the Company has entered into an agreement ("the Option Agreement") with American Metal Climax, Inc. ("Amax") granting to Amax an option to purchase the Company's East St. Louis, Illinois electrolytic zinc refinery for \$3,000,000. As indicated below, this refinery has been shut down for economic reasons. Amax paid the Company \$200,000 on the signing of the Option Agreement. The option expires January 1, 1972, but can be extended by Amax for two additional three month periods (the last of which expires July 1, 1972) upon the payment of \$125,000 for each extension. If the option is exercised, such payments (as well as the \$200,000 payment made on the signing of the Option Agreement) will be deducted from the purchase price. At the special meeting the stockholders will be asked to approve this transaction.

Pursuant to announced plans, the Company has closed down its East St. Louis refinery and its Dumas, Texas smelter, both of which were unprofitable, and has sold the name and goodwill of the American Zinc Sales Company (insofar as it applies to the zinc and cadmium metal businesses) to Texas Gulf Sulphur Company. In the event the proposed sale to Asarco is consummated the Company will no longer have any significant operating assets. The Company's principal remaining assets are described in the Proxy Statement.

As the stockholders are aware, the Company has reported losses for the last five fiscal years. One basic factor which has adversely affected the Company's operations is that the prices of its products have been set in the world market and have not kept pace with its costs of production which have been determined by constantly escalating United States economic factors. In addition, a prolonged strike in 1966-1967 at the Company's Tennessee mines and the continuing failure of the Company's East St. Louis refinery to operate profitably after a substantial capital improvement program have been major causes of the Company's financial problems.

In Management's opinion, substantial additional funds—which the Company does not have—and an increase in labor productivity would be necessary in order to bring the East St. Louis refinery's operations up to original forecasts. During the past few years the Company was able to borrow \$10,000,000 on a subordinated basis from Consolidated Gold Fields Limited ("Gold Fields"), the owner of approximately 61% of the Company's stock and the Company's controlling stockholder, but further funds from this source are not available. In view of the Company's heavy debt burden, Management could not justify additional borrowings even if they were available. The Company's lending banks have insisted that the Company's bank loans be substantially reduced and since Management cannot foresee earnings sufficient to accomplish such a reduction, it has concluded that the only course of action open to the Company is a sale of a substantial part of the Company's assets.

In all these circumstances, your directors have concluded that it is in the best interest of the Company and all of its stockholders to enter into the Agreement of Sale with Asarco and the Option Agreement with Amax, all as more fully described in the accompanying Proxy Statement. The New York investment banking firm of Eastman Dillon, Union Securities & Co. ("Eastman Dillon"), which was retained by the Company for its advice on these matters, concurs in this view.

Gold Fields has informed the Company that it will vote its stock for the proposals. In addition to being a stockholder in the Company, Gold Fields is a subordinated creditor of the Company and the guarantor of a \$7,800,000 portion of the Company's long term indebtedness to a group of banks. Included in the sale to Asarco are the properties of the New Market Zinc Company, which is jointly owned by the Company and a Gold Fields' subsidiary. This subsidiary will receive a portion of the total purchase price. Accordingly, the proposed sales to Asarco and Amax (if the option granted to Amax is exercised) have advantages to Gold Fields aside from its interest as a stockholder. All of the Company's present directors are nominees of or have some relationship with Gold Fields or its subsidiaries. All stockholders are urged to read the accompanying Proxy Statement most carefully so that they can reach an independent opinion on the proposals being submitted.

This letter and the accompanying Proxy Statement constitute the Company's Annual Report for the fiscal year ended June 30, 1971.

Please sign and return your Proxy without delay.

Very truly yours,

RICHARD E. SANSOM, *President*



AMERICAN ZINC COMPANY

20 South Fourth Street / St. Louis, Missouri 63103

Phone (314) 231-4

NEWS RELEASE

For Immediate Release
February 12, 1971

For further information
Contact: R. E. Sansom

American Zinc Company announced today that it is implementing plans to shut down its East St. Louis, Illinois electrolytic refinery and Dumas, Texas smelter. The phaseout of these two facilities is expected to be completed during the last half of calendar year 1971. The company stated that the anticipated closings are necessitated by the continued unprofitability of these units.

The zinc and cadmium metal production of the plants during the period prior to shutdown will be sold under the anticipated agreement announced today jointly with Texas Gulf Sulphur.

The company further stated that it is establishing a reserve of \$14,000,000 (\$10.21 per share) in recognition of possible losses that may result.

American Zinc to Close 2 Plants, Slates Charge Totaling \$14 Million

2/16/71

Reserve Covers Possible Losses
On Illinois and Texas Facilities;
Texas Gulf to Buy Subsidiary

By a WALL STREET JOURNAL Staff Reporter

ST. LOUIS—American Zinc Co., beset by deficits in recent years, announced the closing of two plants, provisions for a \$14 million special charge and an agreement in principle to sell its marketing subsidiary to Texas Gulf Sulphur Co.

Texas Gulf Sulphur will acquire the sales contracts, sales and customer records, trade names and goodwill connected with the zinc and cadmium metal business of American Zinc Sales Co. for \$300,000. The acquisition is expected to be effective about April 1.

American Zinc also said it is implementing plans to close down its East St. Louis, Ill., electrolytic refinery and Tuma's, Texas, smelter because of continued unprofitability. The company said it is establishing a reserve of \$14 million in recognition of possible losses. The Illinois plant has 500 employees and the Texas facility 350.

The phaseout of the two facilities is expected to be completed during the last half of this year. Texas Gulf will become sales agent for all the zinc and cadmium metal produced at the two plants until they are phased out. Texas Gulf said it would be able to assure a continuing supply of zinc and cadmium to meet customers' requirements. Texas Gulf Sulphur is building an electrolytic zinc plant near Timmins, Ontario, scheduled for completion in late 1971, that will produce about 120,000 tons of electrolytic zinc and a million pounds of cadmium annually.

Last month American Zinc said it was discussing the sale of certain or all of its assets with several companies.

American Zinc has a mining division and a stone division, with operations mainly in east Tennessee. The company also has a pigment division consisting of zinc oxide plants in Hillsboro, Ill., and Columbus, Ohio.

Although Texas Gulf Sulphur will acquire the name American Zinc Sales Co., American Zinc retains the right to market zinc oxide products under its name.

Source: Wall Street Journal, February 16, 1971

LEAD & ZINC

American Zinc Expects \$17 Million In Losses on Sales to Amax, Asarco

Metal Market Correspondent

ST. LOUIS — Losses of up to \$17 million are expected by American Zinc Co. from the recently announced sales of its assets to American Smelting and Refining Co. and American Metal Climax, Inc.

Last week American Zinc announced that it had established a \$6 million reserve to cover losses expected from the sale of assets to Asarco announced July 28.

Under terms of the agreement, Asarco will pay \$27 million over a five-year period for several plants, mines and other properties. American Zinc will receive \$22.5 to \$23 million for the properties it owns and its share in jointly-owned properties.

The properties are zinc oxide plants and land at Hillsboro, Ill., and Columbus, Ohio; all mines, plants, mineral properties and other real estate in Tennessee; and all assets of the American Limestone division. Also included are mining properties and mill of New Market Zinc Co., a joint venture owned by American Zinc and Gold Fields

American Corp.

Gold Fields is wholly owned by Consolidated Gold Fields, Ltd., of England, which owns about 60 percent of American Zinc.

Amax Loss

Under its agreement with Amax, American Zinc will receive \$3 million for its East St. Louis electrolytic refinery (located in near-by Sauget, Ill.) which was shut down this year because of its unprofitability. This will result in an \$11 million loss, the company said last week, which will be charged against the \$14 million reserve established to cover such losses on sale of properties.

American Zinc now lists its remaining principal assets as including a smelter and related inventory at Dumas, Tex.; a mill near Dering, N.M., which is not in operation and is under option to a third party; a mining property in Washington that is not profitable at present zinc prices; and interests in a copper and iron ore prospect in the Boss-Bixby area of Missouri and in an iron ore prospect in the Bourbon area of Missouri.

Source: American Metal Market, August 16, 1971

Anaconda: the next zinc casualty?

Faced with spiraling costs, Anaconda may close its Great Falls refinery by mid-1972

Anaconda's Great Falls, Mont., electrolytic zinc refinery may be the next casualty in the seriously threatened US zinc smelting industry. Anaconda made a surprise announcement last week that all of its Montana zinc operations may be closed down by mid-1972 unless contracts for purchase or tolling of concentrates can be made at a profitable level.

Great Falls is the largest electrolytic zinc refinery in the US with a capacity of about 162,000 tpy. But Anaconda has no mine production of its own. Its Montana mines were closed following the 1967-68 strike, and early last year its 90,000-tpy Anaconda, Mont., electrolytic refinery was closed down and operations were consolidated at Great Falls.

An Anaconda spokesman stated that while it is already unprofitable to operate under current purchase and toll contracts, the company faces the prospect of still higher labor, tax, power, freight, and environmental control costs next year. Anaconda said it pays the same labor rates as the copper industry—higher than most other US zinc producers.

The company has advised the Montana Power Co. of its intentions to close the zinc operations unless some relief can be found to make the business profitable. Currently, the Montana Public Service Commission is holding hearings on power rate increases. At current costs, Montana's zinc operations are "no longer competitive," the company's general manager of Montana operations said last week.

If the Great Falls plant is closed down, it will drop US slab zinc capacity from about 900,000 tpy to only 740,000. In 1969—before all of the smelter closings started to hit—the US produced more than 1,045,000 tons of slab zinc

Source: Metals Week, October 4, 1971

METAL PRODUCTION

World smelter capacity rose by 7.8 per cent during 1968 to approximately 4,750,000 tons. Smelter output of 4,020,000 tons was 85 per cent of effective capacity, compared to 83 per cent in 1967 and 89 per cent in 1966. At Avonmouth, Britain, the world's largest Imperial Smelting Furnace (I.S.F.) was blown in early in the year. It has a rated capacity of 120,000 tons of metal a year but operating difficulties kept output down during the run-in period. Another I.S.F., with an annual capacity of 55,000 tons of metal, came into production in Poland late in 1968. Electrolytic zinc plants of 120,000 tons, 35,000 tons and 18,000 tons capacity went into production at Datteln, West Germany; Port Pirie, Australia; and Udaipur, India. It is expected that an electrolytic zinc plant will be opened in South Africa (36,000 tons) in 1969, and that I.S.F.'s will start at Hachinohe, Japan (48,000 tons) in 1969 and Sardinia (60,000 tons) in 1969 or 1970. In addition to the above, expansions of existing plants in Norway, Spain, Japan and Mexico were scheduled for completion in 1968, and other companies in Japan, Italy, Yugoslavia and at Bartlesville in the United States are expected to expand their facilities in 1969.

Source: CERP Publication, Zinc,
Mr. R. J. Shank, 1968

Australian lead-zinc merger set

Australian Mining & Smelting will bring together CRA, NBHC, and Imperial Smelting interests

Two of Australia's biggest miners, Conzinc Riotinto of Australia and New Broken Hill Consolidated, have worked out detailed plans for a merger of their lead and zinc interests. The emerging partnership company will be called Australian Mining & Smelting Co. In addition to the Australian interests, the new company will include Imperial Smelting Corp.'s Avonmouth smelter in the UK. Rio Tinto Zinc—CRA's British parent and a 33% owner of NBHC—announced in July that it planned to consolidate its British and Australian lead-zinc interests in a new Australian company (MW, July 12, p3).

R. H. Carnegie, managing director of CRA and director of NBHC, said that the merger is necessary for the group to be made competitive in world markets. Carnegie said the economic prospects of the rich Broken Hill mines were declining and that access to British and European markets was becoming difficult. The CRA group believed that merging the lead-zinc interests would bring benefits for both production and marketing.

The moves announced involved a complicated reshuffling of the group. A new holding company called NBHC Holding will be formed, and the silver-lead-zinc interests of CRA and NBHC, will be merged into the new Australian Mining & Smelting Co., which will have an issued capital of \$A60-million. AM&S will own Zinc Corp., Sulphide Corp., Southern Power Corp., Herons Creek timber mills, the remains of NBHC's half of Broken Hill Associated Smelters, and a 78% interest in the group's mineral exploration program.

To strengthen its overseas zinc marketing, AM&S will acquire the Avonmouth smelting complex and three associated companies from RTZ. It will also establish a smelter in Holland with the Shell group. The Avonmouth smelter has not been operating profitably, but AM&S believes that under Australian management, it will soon become profitable. NBHC Holdings will own 42.5% of AM&S and CRA will own the remaining 57.5%.

NBHC Holdings will inherit NBHC's one-third interest in Capital Mines—the controlling shareholder in Bougainville Mining—coal deposits at Tarong, Queensland, and bauxite deposits on Wagina Island, Solomons Group. NBHC Holdings will also take over the one-third interest in 40% of Redcross and Wannaway nickel deposits in Western Australia.

Carnegie said the coal, bauxite, and nickel interests were definitely commercial deposits, but he did not know when they would be brought into operation.

Source: Metals Week, October 4, 1971

LEAD AND ZINC**Exporters swallow zinc tax**

Most foreign zinc suppliers are resigned to absorbing the import surcharge—for the present

It's becoming increasingly certain that most of the foreign zinc suppliers to the US will swallow the new import surcharge—at least for the initial 90-day period. Most Canadian producers—who last year supplied 121,000 tons of zinc metal and 318,000 tons of concentrates to the US—have told METALS WEEK that they would follow Cominco's lead and would continue to ship zinc to the US at the old, pre-surcharge prices.

By temporarily absorbing the 1.05¢-a-lb surcharge on zinc metal—in addition to the regular duty of 0.7¢ a lb which foreign shippers already absorb—and approximately the same amount on zinc ores, the Canadians will likely set the trend for other major foreign suppliers. The one exception to this could possibly be the Japanese, who—METALS WEEK has learned—are reportedly having second thoughts about the US as a zinc market. The Japanese ship approximately 50,000 tpy of slab zinc to the US—mostly to West Coast customers.

Canadian producers, as well as many US zinc consumers, are naturally hoping that the surcharge will not extend past the 90 days set down by the President. Since the US is not self-sufficient in either zinc metal or concentrates, consumers cannot afford to have their foreign suppliers withdraw from the US market. And the reverse also holds true—foreign suppliers, such as the Canadians, are dependent on the US market.

For these reasons, the American Die Casting Institute pleaded its case before the US government late last month—obviously hoping that an exception be made in the case of zinc. However, the government is not yielding its position for the moment—and probably will not for at least the 90 days.

Source: Metals Week, Sept. 6, 1971