

UNITED STATES TARIFF COMMISSION

LEAD AND ZINC

**Report to the President (1962)
Under Executive Order 10401**



TC Publication 71

**Washington
October 1962**

UNITED STATES TARIFF COMMISSION

BEN DORFMAN, Chairman

JOSEPH E. TALBOT

WALTER R. SCHREIBER

GLENN W. SUTTON

WILLIAM E. DOWLING

DONN N. BENT, Secretary

Address all communications to
UNITED STATES TARIFF COMMISSION

Washington 25, D.C.

UNITED STATES TARIFF COMMISSION
WASHINGTON 25, D. C.

OFFICE OF THE CHAIRMAN

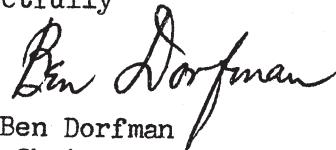
October 1, 1962

Dear Mr. President:

I have the honor to transmit the U.S. Tariff Commission's third report under paragraph 1 of Executive Order 10401 with regard to developments in the trade in lead and zinc since the modification by Proclamation No. 3257 of the tariff concession granted thereon in the General Agreement on Tariffs and Trade. The modification of the concession became effective on October 1, 1958.

The Commission is of the view that developments in the trade in lead and zinc do not indicate such a change in the competitive situation as to warrant institution at this time of a formal investigation under the provisions of paragraph 2 of Executive Order 10401.

Respectfully



Ben Dorfman

Ben Dorfman
Chairman

Enclosure

The President

The White House

C O N T E N T S

| | <u>Page</u> |
|---|-------------|
| Report to the President under paragraph 1 of Executive Order 10401 on developments in the trade in lead and zinc: | |
| Introduction----- | 1 |
| U.S. mine output----- | 3 |
| Employment and hourly wage payments in U.S. lead and zinc mining----- | 4 |
| U.S. Government assistance programs----- | 5 |
| U.S. market prices----- | 6 |
| Margin between U.S. and London market prices: | |
| Lead----- | 7 |
| Zinc----- | 7 |
| Industrial consumption----- | 8 |
| Producers' stocks: | |
| Lead----- | 9 |
| Zinc----- | 9 |
| U.S. commercial imports: | |
| Lead----- | 10 |
| Zinc----- | 10 |
| U.S. exports----- | 11 |
| International Lead and Zinc Study Group----- | 11 |
| Statistical appendix----- | 13 |

(TC28306)

TABLES

| | |
|---|----|
| 1. Unmanufactured lead and zinc: U.S. rates of duty under the Tariff Act of 1930----- | 14 |
| 2. Lead and zinc: U.S. import quotas established beginning Oct. 1, 1958, by countries----- | 15 |
| 3. Lead: Annual equivalent of quarterly import quotas established on Oct. 1, 1958, by countries, and actual imports under the quotas, 1959-61, January- June 1961 and January-June 1962----- | 16 |
| 4. Zinc: Annual equivalent of quarterly import quotas established on Oct. 1, 1958, by countries, and actual imports under the quotas, 1959-61, January- June 1961 and January-June 1962----- | 17 |

TABLES--continued

| | <u>Page</u> |
|---|-------------|
| 5. Unmanufactured lead: U.S. production, stocks, imports, exports, consumption, and market prices, average 1953-57, annual 1958-61, and by quarters, January 1960-June 1962----- | 18 |
| 6. Unmanufactured zinc: U.S. production, stocks of slab zinc, imports, exports, consumption, and market prices, average 1953-57, annual 1958-61, and by quarters, January 1960-June 1962----- | 19 |
| 7. Lead and zinc: Mine output, smelter output of primary metal, and consumption of primary metal in the United States, and in the world, average 1953-57, annual 1958-61----- | 20 |
| 8. Unmanufactured lead and zinc: U.S. production, commercial imports for consumption, domestic exports, and industrial consumption, average 1953-57, annual 1958-61, January-June 1961 and January-June 1962----- | 21 |
| 9. Lead and zinc mining and milling in the United States: Average number of all employees, average number of production and related workers, wages paid, and man-hours worked 1956 and 1958-61----- | 22 |
| 10. Lead metal: Average monthly market prices at New York and at London, January 1959-August 1962----- | 23 |
| 11. Prime Western zinc: Average monthly market prices in the United States and at London, January 1959-August 1962--- | 24 |
| 12. Lead: Producers' stocks, by kinds, at primary smelters and refineries in the United States, average of year-end stocks, 1953-57, at the end of each year, 1958-61, and at the end of July 1961 and July 1962----- | 25 |
| 13. Zinc in ore and other zinciferous materials: Indexes of stocks held at zinc smelters in the United States, average of yearend stocks, 1953-57, at the end of each year, 1958-61, and at the end of June 1961 and June 1962----- | 26 |
| 14. Slab zinc: Producers' primary and secondary stocks in the United States, by standard grades, average of year-end stocks 1953-57, at the end of each year, 1958-61, and at the end of July 1961 and July 1962----- | 27 |

LEAD AND ZINC

Report to the President Under Paragraph 1 of Executive Order 10401 On Developments in the Trade in Lead and Zinc

Introduction

After investigation by the Tariff Commission and report to the President under section 7 (the escape-clause procedure) of the Trade Agreements Extension Act of 1951, as amended, ^{1/} the President by Proclamation No. 3257, dated September 22, 1958 (3 CFR, 1958 Supp., p.39) modified the concessions on unmanufactured lead and zinc granted in the General Agreement on Tariffs and Trade (GATT). The change in the U.S. customs treatment of unmanufactured lead and zinc resulting from this action became effective October 1, 1958.

Under the terms of the proclamation, the U.S. import duties on unmanufactured lead and zinc were not changed, but the quantity of commercial imports of both of these products that could be entered annually was limited to 80 percent of the average annual commercial imports during the 5-year period 1953-57. The quotas, moreover, were subdivided by calendar quarters, by tariff schedule classifications, and by principal countries exporting to the United States. Table 1, in the appendix,

^{1/} See U.S. Tariff Commission, Lead and Zinc: Report to the President on Escape-Clause Investigation No. 65 . . ., April 1958 (processed).

shows the rates of duty for unmanufactured lead and zinc articles originally provided for in the Tariff Act of 1930 and the reduced rates now in effect as a result of tariff concessions granted by the United States. Table 2 shows the quarterly quotas that were imposed by Presidential Proclamation No. 3257.

Paragraph 1 of Executive Order 10401 of October 14, 1952 (3 CFR, 1949-1953 Comp., p. 901), requires the Commission to keep under review developments with regard to any product respecting which a trade-agreement concession has been withdrawn or modified pursuant to action taken under the escape-clause procedure, and to make periodic reports to the President concerning such developments. The first such report must be made not later than 2 years after the escape-clause action is taken, and subsequent reports are required at intervals of 1 year.

If, in the judgment of the Commission, conditions of competition with respect to the trade in the imported articles and the like or directly competitive domestic products concerned have so changed as to warrant a formal investigation to determine whether the withdrawn or modified trade-agreement concession may be restored in whole or in part without resultant serious injury to the domestic industry, or upon request of the President, such a formal investigation must be instituted by the Tariff Commission under paragraph 2 of the order.

This is the third periodic report on unmanufactured lead and zinc pursuant to paragraph 1 of Executive Order 10401. The first such report was submitted to the President on September 30, 1960, and the

second on October 2, 1961. The Commission has made no reports pursuant to paragraph 2. Since modification of the customs treatment by proclamation, the Commission has submitted two comprehensive reports on lead and zinc to the Congress pursuant to Senate resolutions. ^{1/} Both reports reviewed developments subsequent to 1952. The present report reviews major developments in recent years.

U.S. mine output

The average annual mine production of lead in the United States was 25 percent smaller during 1959-61 than during 1953-57 (the base period used in establishing the quotas for imports of unmanufactured lead and zinc). Mine output, which declined steadily after 1956, reached a low of 247,000 tons in 1960, but increased to 262,000 tons in 1961 (table 5). The output in 1960 (the smallest since 1899) was partly attributable to extensive interruptions of mining activities by labor disputes. In the first half of 1962, the latest period for which data are available, mine output of lead amounted to 139,000 tons, compared with 138,000 tons in the corresponding period of 1961.

^{1/} U.S. Tariff Commission, Lead and Zinc: Report to the Congress on Investigation No. 332-26 (Supplemental) Under Section 332 of the Tariff Act of 1930 Made Pursuant to Senate Resolution 162, 86th Congress, Adopted August 21, 1959, March 1960 (processed), and Lead and Zinc: Report to the Congress on Investigation No. 332-26 (Supplemental 2) Under Section 332 of the Tariff Act of 1930 Made Pursuant to Senate Resolution 206, 87th Congress, Adopted September 23, 1961, May 1962 (processed).

Lead is regularly mined in the United States in 17 States, but the bulk of the U.S. output is produced in 4 States--Missouri, Idaho, Utah, and Colorado. Mine production in these States during 1959-61 accounted for 86 percent of the domestic output.

Domestic mine production of recoverable zinc, which averaged 522,000 tons per year during 1953-57, was 425,000 tons in 1959, 435,000 tons in 1960, and 464,000 tons in 1961 (table 6). Mine output of zinc in each of the years 1959-61 was lower than in any year since 1934, except in 1958. Production in the first half of 1962 (245,000 tons) was about the same as in the corresponding period of 1961 (240,000 tons).

Zinc ore is regularly mined in the United States in 19 States, but its production is not as concentrated as that of lead. The major share of zinc is mined in 5 States--Tennessee, New York, Idaho, Colorado, and Utah. In each of these States annual production exceeded 30,000 tons in recent years; together they accounted for 60 percent of the total domestic mine output in 1959-61.

Employment and hourly wage payments
in U.S. lead and zinc mining

The total employment at domestic lead and zinc mines and mills has declined in recent years despite increased mine output, especially of zinc. The total number of employees engaged in these operations averaged 16,845 in 1956, 9,893 in 1959, and 9,430 in 1960; the average

number in 1961 (9,312) was about 6 percent less than that in 1959 (table 9). The average number of production and related workers decreased from 8,155 in 1959 to 7,752 in 1960, but increased to 7,803 in 1961, which was about 4 percent less than the average in 1959.

The man-hours actually worked by production and related workers have varied roughly with the number of employees. They declined from 16.0 million in 1959 to 15.3 million in 1960, and increased to 15.5 million in 1961, when they were about 3 percent lower than in 1959. The hourly wages paid to production and related workers (including man-hours paid for holidays, sick leave, and vacations) averaged \$2.25 in 1959, \$2.29 in 1960, and \$2.31 in 1961.

U.S. Government assistance programs

Government assistance in the exploration of domestic lead and zinc ores was authorized in 1958 by Public Law 85-701 (72 Stat. 700). At the end of September 1962, nine Government contracts, all under a program administered by the Office of Minerals Exploration, were in force for the exploration of domestic deposits of lead-zinc and lead-zinc-copper ores. Government commitments under these contracts totaled \$463,670, which was equivalent to 50 percent of the total authorized expenditures of \$927,340.

The latest Government program of assistance to the mining segment of the domestic lead and zinc industry is provided for in Public Law 87-347 (75 Stat. 766), approved October 3, 1961. The act provides for

so-called stabilization payments by the Secretary of the Interior to eligible producers on their sales of lead and zinc ores and concentrates mined subsequent to the approval of the act. The program is to expire at the end of 1965. Aggregate payments may not exceed \$4.5 million during each of the calendar years 1962 and 1963, \$4 million during 1964, and \$3.5 million during 1965. Funds for this program were made available late in July 1962. On September 21, 1962, 40 applications for stabilization payments had been received by the General Services Administration, the agency designated to administer the program. Of the 40 applicants, 5 have been certified as being eligible to participate in the program; the applications of 7 have been disapproved, and those of the remaining 28 are awaiting action.

U.S. market prices

Prices received by U.S. producers of lead (Common grade, New York) averaged 14.7 cents per pound during 1953-57; thereafter they averaged 12.2 cents in 1959, 11.9 cents in 1960, and 10.9 cents in 1961 (table 5). During the current year (1962) the price declined from 10 cents at the beginning of the year to the present level (September 1962) of 9.5 cents per pound, which has prevailed since February 9 (table 10).

The market price of domestically produced slab zinc (Prime Western, f.o.b. East St. Louis) averaged 11.4 cents in 1959, 12.9 cents in 1960, and 11.5 cents in 1961 (table 6). The price in 1961 was nearly the same as the average for 1953-57. At the beginning of 1962, the price was 12 cents per pound; it declined to 11.5 cents on April 2 and was still at that level in September 1962 (table 11).

A large part of the slab zinc sold in the United States consists of metal of higher purity than Prime Western. Traditionally the higher grades of zinc have sold at premiums above the price of the Prime Western grade, ranging from 0.1 cent to 1 cent per pound. According to information obtained from the trade, the higher grades of slab zinc in recent months have frequently been sold in the U.S. market at prices below the prices of Prime Western grade zinc plus the respective standard premiums.

Margin between U.S. and London market prices

Lead.--Throughout the period 1959-61, the monthly average spread between the New York and London prices has exceeded, at times by a substantial margin, the U.S. import duty plus the cost of transporting and insuring lead shipped from London to New York City. In recent months such costs have been equal to about 2.1 cents per pound of lead. The average New York price of lead exceeded the London price by 3.3 cents a pound in 1959, 2.9 cents in 1960, 2.8 cents in 1961, and by 2.4 cents during the first 8 months of 1962, the last period for which data are available (table 10). During March and April 1962 the average differential was about 1.9 cents, but has since widened and was 3.1 cents in August.

Zinc.--The average New York price of Prime Western zinc exceeded the average London price by 1.7 cents in 1959, 2.3 cents in each of the years 1960 and 1961, and 3.7 cents in the first 8 months of 1962 (table 11). During most of the period 1959-61 the average monthly price

differential was greater than the aggregate of the U.S. import duty plus costs of transportation and insurance; the differential was smaller only during the last half of 1959, January 1960, and February-May 1961. In recent months the average price differential has greatly exceeded such costs; in August 1962 it was more than double these costs. In recent months the U.S. import duty plus the cost of shipping zinc has equaled about 1.8 cents per pound of zinc.

Industrial consumption

The U.S. industrial consumption of lead declined from about 1,091,000 short tons in 1959 to 1,021,000 tons in 1960 and then rose to 1,027,000 tons in 1961. Although such consumption in 1961 was 4 percent greater than that in 1958, it was 12 percent smaller than the annual average during 1953-57. In the first 6 months of 1962, consumption was about 6 percent greater than in the corresponding period of 1961 (table 5).

The industrial consumption of zinc declined from 1,278,000 tons in 1959 to 1,159,000 tons in 1960; it then increased to 1,207,000 tons in 1961, when it was 6 percent greater than in 1958 but 8 percent smaller than the annual average during 1953-57. In the first 6 months of 1962, consumption was about 23 percent greater than in the corresponding period of 1961 (table 6).

Producers' stocks

Lead.--Yearend stocks of lead in all forms at domestic lead smelters and refineries increased from an average of 183,000 short tons during 1953-57 to 230,000 tons in 1959, 306,000 tons in 1960, and 312,000 tons in 1961 (table 12). Yearend stocks were equal to about 30 percent of the domestic annual consumption of lead in 1960 and 1961, and 21 percent in 1959. Stocks at the end of July 1962 were 289,000 tons, compared with 315,000 at the end of July 1961.

Most of the stocks held by the smelters and refineries were in the form of refined lead, including antimonial lead. In the period 1959-61, refined lead accounted for 58 percent of total stocks and lead in ores for 27 percent. The remainder consisted of base bullion.

Zinc.--Producers' (smelters' and refineries') stocks of slab zinc increased from an average of 116,000 short tons during 1953-57 to 154,000 tons at the end of 1959, 191,000 tons at the end of 1960, but declined to 151,000 tons by the end of 1961 (table 14). Yearend stocks were equal to about 12 percent of domestic annual consumption of zinc in both 1959 and 1961 and to 16 percent in 1960. Stocks at the end of July 1962 were 162,000 tons, compared with 207,000 tons at the end of July of the previous year.

Smelters' average yearend stocks of zinc in ore and in other zinciferous materials during 1959-61 were of about the same magnitude as during 1953-57. At the end of June 1962, such stocks were 14 percent lower than those at the end of June 1961 (table 13).

U.S. commercial imports^{1/}

Lead.--Annual imports of unmanufactured lead subject to the quotas have varied slightly in recent years, and have virtually equaled the quantities permitted under the quotas (354,720 tons). Except for the "All other" category for lead ores in 1959 and 1960, the quota allotments were wholly, or almost wholly, filled by all countries in the 3 years 1959-61. Imports amounted to 347,000 tons in 1959 and to about 354,000 tons in both 1960 and 1961 (table 3). In the first half of 1962 they amounted to 171,000 tons compared with 177,000 tons during the corresponding period of 1961.

Commercial imports of unmanufactured lead were equal to 34 percent of total industrial consumption of lead in the United States during 1959-61, compared with 38 percent in 1953-57 (table 8).

Zinc.--Imports of unmanufactured zinc subject to the quotas have declined in recent years; they fell from 514,000 tons in 1959 to 502,000 tons in 1960, and 480,000 tons in 1961 (table 4). Imports of zinc fell short of the permissible quantities under the quotas (520,960 tons) in each of the years 1959-61. Imports were 1 percent smaller than the quantities permitted under the quotas in 1959, 4 percent smaller in 1960, and 8 percent in 1961. In the first half of 1962, imports amounted to 257,000 tons, compared with 234,000 tons in the corresponding period of 1961.

^{1/} "Commercial imports" refers to imports for consumption exclusive of imports for U.S. Government account and exclusive of imports free of duty under bond for smelting, refining, and export.

Commercial imports of unmanufactured zinc were equal to 41 percent of total industrial consumption of zinc during 1959-61, compared with 50 percent in the period 1953-57 (table 8).

U.S. exports

Exports of both lead and zinc in all unmanufactured forms have been very small in relation to imports (table 8). In the period 1959-61 about 12 percent of the exports of lead and more than two-thirds of those of zinc consisted of metal produced from materials imported free of duty under bond for smelting, refining, and export. Imports entered for this purpose are not restricted by quotas.

Exports of unmanufactured lead increased from 4,121 tons in 1959 to 5,843 tons in 1960 and 11,733 tons in 1961 (table 5). About 32 percent of such exports during 1959-61 consisted of refined metal; the remainder consisted of ore and scrap. Exports amounted to 3,254 tons during the first 6 months of 1962, compared with 4,269 tons in the corresponding period of 1961.

Exports of unmanufactured zinc amounted to 22,962 tons in 1959, 87,236 tons in 1960 and 57,625 tons in 1961 (table 6). More than 80 percent of the total in 1959-61 consisted of slab zinc. Exports in the first 6 months of 1962 were about 35 percent lower than in the corresponding period of 1961.

International Lead and Zinc Study Group

Since November 1958 a number of the major lead and zinc producing and consuming countries have endeavored to bring the production and

consumption of these two metals into closer balance than had theretofore prevailed. Conferences have been held under the auspices of the United Nations through the medium of the International Lead and Zinc Study Group. At a meeting in March 1961, as at previous meetings, a number of countries announced that they would curtail the production of lead ore and metal. The United States agreed to acquire 50,000 tons of lead metal from Australia and 55,000 tons of lead metal from Canada. About 87 percent of this quantity had actually been received by the U.S. Government by the end of August 1962.

No specific action was taken with respect to zinc at the March 1961 meeting of the Study Group.

The Study Group met again in both March and May 1962. At the March meeting delegates of important producing and consuming countries indicated a willingness to limit production. 1/ At the May meeting, 2/ Australia, Peru, and Sweden indicated that they would curtail production of lead metal, and members of the European Economic Community, as well as Spain and Japan, stated that they would curtail production of both lead and zinc metal. The Soviet Union indicated that its exports of the two metals to the West in 1962 would not exceed those in 1961. Mexico submitted a plan for curtailing the production of lead in order to bring it into balance with industrial consumption. This proposal and others were scheduled for consideration at a meeting of the Study Group in October 1962.

1/ Press Release No. EC/Zinc/12, Mar. 21, 1962, issued on behalf of the study group by the Information Service, European Office of the United Nations, Geneva.

2/ Press Release No. EC/2122, May 31, 1962, Office of Public Information, United Nations, New York.

STATISTICAL APPENDIX.

Table 1.—Unmanufactured lead and zinc: U.S. rates of duty under the Tariff Act of 1930

| Tariff paragraph and description | Statutory rate 1/ | Reduced rate now in effect (September 1962) 2/ |
|--|---|--|
| | Rate | Effective date |
| Unmanufactured lead: | | |
| Lead-bearing ores, flue dust, and mattes of all kinds | | |
| Par. 391: | 1-1/2¢ per lb. on lead content. | 3/4¢ per lb. on lead content; also subject to quota limitations. |
| Par. 396: | 2-1/8¢ per lb. on lead content. | 1-1/16¢ per lb. on lead content; also subject to quota limitations. |
| Par. 397: | Lead bullion or base bullion, lead pigs and bars, lead dross, reclaimed lead, scrap lead, type metal, antimonial lead, antimonial scrap lead, and alloys or combinations of lead, not specially provided for. | Do. |
| Unmanufactured zinc: | | |
| Par. 393: | Zinc-bearing ores of all kinds, except pyrites containing more than 3% zinc. | 1-1/2¢ per lb. on zinc content; 3/5¢ per lb. on zinc content; also subject to quota limitations. |
| Par. 394: | Zinc in blocks, pigs, or slabs | 1-3/4¢ per lb. 7/10¢ per lb.; also subject to quota limitations. |
| Old and worn-out zinc, fit only to be remanufactured, zinc dross, and zinc skimmings. | 1-1/2¢ per lb. | 3/4¢ per lb.; also subject to quota limitations. |
| 1/ Currently applicable to the products of Communist-dominated countries or areas designated by the President pursuant to sec. 5 of the Trade Agreements Extension Act of 1951. | | |
| 2/ Pursuant to concessions granted in the General Agreement on Tariffs and Trade (GATT) effective on the dates designated. See table 2 for quarterly import quotas imposed upon lead and zinc by Presidential Proclamation No. 3257, effective Oct. 1, 1958. | | |

Table 2.--Lead and zinc: U.S. import quotas established beginning Oct. 1, 1958,
by countries 1/

| Item and country | (In short tons) | | | |
|--|-----------------|-------------------|-----------------|-------------------|
| | Lead | | Zinc | |
| | Quarterly quota | Annual equivalent | Quarterly quota | Annual equivalent |
| Ores (lead or zinc content): <u>2/</u> | | | | |
| Peru----- | 8,080 | 32,320 | 17,560 | 70,240 |
| Union of South Africa----- | 7,440 | 29,760 | 3/ | 3/ |
| Canada----- | 6,720 | 26,880 | 33,240 | 132,960 |
| Australia----- | 5,040 | 20,160 | 3/ | 3/ |
| Bolivia----- | 2,520 | 10,080 | 3/ | 3/ |
| Mexico----- | 3/ | 3/ | 35,240 | 140,960 |
| All other----- | 3,280 | 13,120 | 8,920 | 35,680 |
| Total----- | 33,080 | 132,320 | 94,960 | 379,840 |
| Metal: <u>4/</u> | | | | |
| Mexico----- | 18,440 | 73,760 | 3,160 | 12,640 |
| Australia----- | 11,840 | 47,360 | 3/ | 3/ |
| Canada----- | 7,960 | 31,840 | 18,920 | 75,680 |
| Yugoslavia----- | 7,880 | 31,520 | 3/ | 3/ |
| Peru----- | 6,440 | 25,760 | 1,880 | 7,520 |
| Belgium and Luxembourg----- | 3/ | 3/ | 3,760 | 15,040 |
| Belgian Congo----- | 3/ | 3/ | 2,720 | 10,880 |
| Italy----- | 3/ | 3/ | 1,800 | 7,200 |
| All other----- | 3,040 | 12,160 | 3,040 | 12,160 |
| Total----- | 55,600 | 222,400 | 35,280 | 141,120 |
| Total ores and metal----- | 88,680 | 354,720 | 130,240 | 520,960 |

1/ The import quotas apply to dutiable imports for immediate consumption and to withdrawals from bonded warehouses (not to entries into bonded warehouses).

Articles produced in any country not named in the list of countries shown in the above table, for each of the 4 categories shown, are subject to the quota for "All other" foreign countries. The proclamation specifically exempts the following from the quota restrictions imposed therein:

(a) Any article imported by or for the account of the U.S. Government; or any imported article which is under contract for delivery in the United States for the account of a corporation wholly owned by the U.S. Government.

(b) Any lead or zinc metal article described in footnote 4 below exported to the United States before Sept. 22, 1958.

(c) Lead-bearing ores, flue dust, and mattes of all kinds, and zinc-bearing ores of all kinds (except pyrites containing not over 3 percent of zinc) exported to the United States before Sept. 22, 1958. This exemption does not apply to withdrawals for consumption of "metal producible" from bonded smelters under sec. 312, Tariff Act of 1930.

(d) Any lead-bearing ore, flue dust, or matte (dutiable under par. 391) which contains less than 2 percent of lead.

(e) Any zinc-bearing ore (dutiable under par. 393) which contains less than 1 percent of zinc.

2/ Lead-bearing ores, flue dust, and mattes entered under par. 391, and zinc-bearing ores entered under par. 393 of the Tariff Act of 1930. The latter excludes zinc fume.

3/ Included in "All other."

4/ For lead, the lead content of lead or base bullion, lead pigs and bars, lead scrap and dross, antimonial lead, type metal, and all alloys or combinations of lead, not specially provided for, entered under par. 392 of the Tariff Act of 1930. For zinc, the gross weight of zinc blocks, pigs, or slabs and zinc scrap, dross, and skimmings entered under par. 394 of the Tariff Act of 1930.

Table 3.--Lead: Annual equivalent of quarterly import quotas established on Oct. 1, 1958, by countries, and actual imports under the quotas, 1959-61, January-June 1961, and January-June 1962
 (In short tons)

| Item and country | Annual equivalent of quota | Actual imports under the import quotas in-- | | | |
|------------------------------|----------------------------|---|---------|---------|----------------|
| | | 1959 | 1960 | 1961 | Jan.-June 1962 |
| Ores (lead content): | | | | | |
| Peru | 32,320 | 32,320 | 32,320 | 32,320 | 16,160 |
| Union of South Africa | 29,760 | 29,760 | 29,760 | 29,760 | 14,880 |
| Canada | 26,880 | 26,880 | 26,880 | 26,880 | 13,440 |
| Australia | 20,160 | 20,160 | 20,160 | 20,160 | 10,080 |
| Bolivia | 10,080 | 10,080 | 10,080 | 10,080 | 5,040 |
| All other | 13,120 | 5,522 | 12,624 | 13,120 | 6,560 |
| Total | 132,320 | 124,722 | 131,824 | 132,320 | 66,160 |
| Metal (lead content): | | | | | |
| Mexico | 73,760 | 73,760 | 73,754 | 73,760 | 36,880 |
| Australia | 47,360 | 47,360 | 47,360 | 47,360 | 23,680 |
| Canada | 31,840 | 31,840 | 31,840 | 31,840 | 15,920 |
| Yugoslavia | 31,520 | 31,520 | 31,520 | 31,487 | 15,760 |
| Peru | 25,760 | 25,756 | 25,758 | 25,755 | 12,878 |
| All other | 12,160 | 12,160 | 12,160 | 12,160 | 6,080 |
| Total | 222,400 | 222,396 | 222,392 | 222,362 | 111,198 |
| Grand total (ores and metal) | 354,720 | 347,118 | 354,216 | 354,682 | 177,358 |

Source: Quotas, from Presidential Proclamation No. 3257, dated Sept. 22, 1958; imports subject to quotas, from the U.S. Department of the Treasury.

Table 4.--Zinc: Annual equivalent of quarterly import quotas established on Oct. 1, 1958, by countries, and actual imports under the quotas, 1959-61, January-June 1961, and January-June 1962

(In short tons)

| Item and country | Annual equivalent of quota | Actual imports under the import quotas in-- | | |
|------------------------------|----------------------------|---|---------|----------------|
| | | 1959 | 1960 | Jan.-June 1961 |
| Ores (zinc content): | | | | |
| Mexico | 140,960 | 140,960 | 140,960 | 70,480 |
| Canada | 132,960 | 132,960 | 110,173 | 50,895 |
| Peru | 70,240 | 70,240 | 67,535 | 35,120 |
| All other | 35,680 | 35,680 | 35,680 | 17,840 |
| Total | 379,840 | 379,840 | 354,254 | 174,335 |
| Metal (gross weight): | | | | |
| Canada | 75,680 | 75,680 | 73,157 | 35,694 |
| Belgium and Luxembourg | 15,040 | 11,425 | 12,465 | 5,379 |
| Mexico | 12,640 | 9,412 | 8,601 | 8,498 |
| Belgian Congo 1/ | 10,880 | 10,880 | 9,618 | 10,876 |
| Peru | 7,520 | 7,517 | 7,518 | 7,517 |
| Italy | 7,200 | 7,200 | 3,614 | 883 |
| All other | 12,160 | 12,160 | 11,035 | 12,160 |
| Total | 141,120 | 134,274 | 121,762 | 125,556 |
| Grand total (ores and metal) | 520,960 | 514,114 | 501,602 | 479,810 |
| | | | | 234,073 |
| | | | | 257,195 |

1/ Beginning June 30, 1960, Republic of the Congo.

Source: Quotas, from Presidential Proclamation No. 3257, dated Sept. 22, 1958; imports subject to quotas, from the U.S. Department of the Treasury.

Table 5.—Manufactured lead: U.S. production, stocks, imports, exports, consumption, and market prices, average 1953-57, annual 1958-61, and by quarters, January 1960-June 1962

(In short tons of lead content, except as otherwise indicated)

| Period | Production | | Stocks at end of period | | Imports for consumption Σ | | | Domestic exports Σ | Industrial consumption Σ | Average price per pound Σ |
|------------------|--|--------------------|-------------------------|--------------------------|----------------------------------|----------|--------|---------------------------|---------------------------------|----------------------------------|
| | Primary (mine out- put) Σ | Secondary Σ | Total | Produc- ers' Σ | Consum- ers' Σ | Dutiable | Free | Total | | |
| Average 1953-57 | 339,426 | 493,139 | 832,565 | 183,237 | 121,833 | 445,182 | 46,262 | 491,444 | 5,915 | 1,171,390 |
| Annual: | | | | | | | | | | Cents 14.670 |
| 1958 | 267,377 | 401,787 | 669,164 | 303,316 | 122,900 | 561,263 | 46,632 | 607,895 | 3,386 | 986,387 |
| 1959 | 255,586 | 451,287 | 706,973 | 230,328 | 126,496 | 368,149 | 44,810 | 413,259 | 4,121 | 1,091,149 |
| 1960 | 246,669 | 469,903 | 716,572 | 305,841 | 97,268 | 357,561 | 3,214 | 360,755 | 5,843 | 1,021,172 |
| 1961 | 261,921 | 452,792 | 714,713 | 312,402 | 99,140 | 354,307 | 40,415 | 394,722 | 11,733 | 1,027,216 |
| 1960: | | | | | | | | | | |
| January-March | 69,889 | 116,871 | 186,760 | 244,377 | 126,697 | 88,219 | 2,425 | 90,644 | 490 | 263,400 |
| April-June | 64,662 | 122,177 | 186,839 | 270,521 | 120,130 | 90,953 | 3,52 | 91,305 | 1,650 | 261,700 |
| July-September | 54,538 | 113,443 | 167,981 | 289,562 | 118,124 | 87,042 | - | 87,042 | 1,840 | 254,600 |
| October-December | 57,580 | 117,412 | 174,992 | 305,841 | 97,268 | 91,327 | 4,37 | 91,764 | 1,863 | 241,472 |
| 1961: | | | | | | | | | | |
| January-March | 69,291 | 109,772 | 179,063 | 314,466 | 94,766 | 85,860 | 49 | 85,909 | 1,223 | 247,886 |
| April-June | 68,251 | 114,491 | 182,742 | 307,485 | 106,372 | 90,957 | 3,870 | 94,827 | 3,046 | 253,614 |
| July-September | 62,374 | 110,885 | 173,259 | 304,133 | 107,690 | 89,717 | 3,854 | 93,571 | 4,650 | 252,709 |
| October-December | 62,005 | 117,644 | 179,649 | 312,402 | 99,140 | 87,773 | 32,642 | 120,115 | 2,814 | 273,007 |
| 1962: | | | | | | | | | | |
| January-March | 66,229 | 104,323 | 170,652 | 297,938 | 104,331 | 95,271 | 19,329 | 114,600 | 610 | 269,443 |
| April-June | 72,679 | 103,823 | 176,502 | 283,643 | 106,015 | 98,588 | 10,210 | 108,798 | 2,644 | 263,278 |
| | | | | | | | | | | 9,500 |

Σ / Recoverable lead content from ores and concentrates produced, and from old tailings, mine dumps, and smelter slag dumps reclaimed.

Σ / Lead recovered in all forms from all types of scrap. Quarterly data for 1960-62 are estimated from preliminary monthly data.

Σ / Lead in ore and matte and in process at smelters; lead in base bullion at smelters and refineries, in transit to refineries, and in process at refineries; refined in pig lead; and antimonial lead. Data for 1953-57 represent average of year-end stocks.

Σ / Lead in refined soft lead, antimonial lead, unmelted white scrap, percentage metals, copper-base scrap, drosses, residues, and so forth. Beginning with January 1956, data also include secondary smelter metal stocks. Data for 1953-57 represent average of year-end stocks.

Σ / Lead content of lead-bearing ores and concentrates, flue dust, and mattes; lead bullion or base bullion; lead pigs and bars; type metal and antimonial lead; and reclaimed lead, lead scrap, and lead dross. Data for 1960-62 are preliminary.

Σ / Lead content of lead ores, concentrates, mattes, and base bullion; and the gross weight of lead pigs, bars, anodes, lead scrap, and type metal and antimonial lead prior to 1958. Beginning in 1958, exports of type metal and antimonial lead are not separately available and are not included. Data for 1960-62 are preliminary.

Σ / As reported to the U.S. Bureau of Mines; represents all manufactured lead from primary and secondary sources consumed (put into process by industrial concerns) including lead in lead-containing alloys, lead in ores consumed directly in the manufacture of lead pigments and salts, and lead that went directly (without remelting) from scrap to fabricated products. These data do not include withdrawals for the Government stockpiles. Data for 1961 and 1962 are preliminary.

Σ / Average price of common lead at New York.

Source: Production, consumers' stocks, and consumption, from official statistics of the U.S. Bureau of Mines, except as noted; producers' stocks, from the American Bureau of Metal Statistics; imports and exports, compiled from official statistics of the U.S. Department of Commerce; prices, from E & MJ Metal and Mineral Markets.

Table 6.—Unmanufactured zinc: U.S. production, stocks of slab zinc, imports, exports, consumption, and market prices, average 1953-57, annual 1958-61, and by quarters, January 1960-June 1962

| Period | (In short tons of zinc content, except as otherwise indicated) | | | | | | | | | | Domestic exports ^{6/} | Industrial consumption ^{7/} | Average price per pound ^{8/} |
|------------------------|--|-------------------------|--------------------------------------|---|---------------------------------------|---------|--------|---------|--|--------|--------------------------------|--------------------------------------|---------------------------------------|
| | Production | | Stocks of slab zinc at end of period | | Imports for consumption ^{2/} | | | | | | | | |
| | Primary (mine output) ^{1/} | Secondary ^{2/} | Total | Producers' ^{3/} consumers' ^{4/} | Dutiable | Free | Total | | | | | | |
| Average 1953-57-----: | 521,929 | 283,337 | 805,266 | 116,276 | 100,334 | 672,597 | 56,932 | 729,529 | | 28,325 | 1,309,355 | | 11.746 |
| Annual: | | | | | | | | | | | | | |
| 1958-----: | 412,005 | 230,332 | 642,337 | 190,237 | 89,261 | 687,189 | 40,891 | 728,080 | | 7,378 | 1,142,165 | | 10.309 |
| 1959-----: | 422,303 | 276,254 | 701,557 | 154,419 | 99,577 | 558,993 | 43,868 | 602,861 | | 22,962 | 1,278,376 | | 11.448 |
| 1960-----: | 425,427 | 265,820 | 701,247 | 190,810 | 66,111 | 504,323 | 65,911 | 570,234 | | 87,326 | 1,158,938 | | 12.946 |
| 1961-----: | 464,390 | 237,967 | 702,357 | 151,189 | 90,559 | 482,449 | 39,446 | 521,595 | | 57,625 | 1,207,469 | | 11.542 |
| 1960: | | | | | | | | | | | | | |
| January-March-----: | 118,301 | 72,984 | 191,285 | 136,566 | 100,404 | 128,078 | 13,506 | 141,584 | | 15,326 | 345,946 | | 12.959 |
| April-June-----: | 121,844 | 63,798 | 185,642 | 187,686 | 74,471 | 125,827 | 17,597 | 143,424 | | 18,775 | 287,981 | | 13.000 |
| July-September-----: | 102,439 | 63,593 | 166,032 | 192,466 | 67,463 | 122,151 | 17,943 | 140,094 | | 23,506 | 255,735 | | 13.000 |
| October-December-----: | 92,843 | 65,445 | 158,288 | 190,810 | 66,111 | 128,267 | 16,865 | 145,132 | | 29,719 | 266,276 | | 12.819 |
| 1961: | | | | | | | | | | | | | |
| January-March-----: | 121,686 | 56,737 | 178,423 | 222,889 | 59,111 | 116,435 | 8,775 | 125,210 | | 24,817 | 261,312 | | 11.510 |
| April-June-----: | 118,412 | 61,238 | 179,650 | 207,820 | 59,511 | 117,296 | 11,912 | 129,208 | | 10,332 | 306,590 | | 11.500 |
| July-September-----: | 112,166 | 56,131 | 168,297 | 165,064 | 62,922 | 113,744 | 9,978 | 123,722 | | 13,373 | 306,798 | | 11.500 |
| October-December-----: | 112,126 | 63,861 | 175,987 | 151,189 | 90,559 | 134,674 | 8,781 | 143,455 | | 8,903 | 332,769 | | 11.658 |
| 1962: | | | | | | | | | | | | | |
| January-March-----: | 117,116 | 66,647 | 183,763 | 138,686 | 86,273 | 131,144 | 16,577 | 147,721 | | 10,690 | 354,326 | | 12.000 |
| April-June-----: | 127,958 | 65,417 | 193,375 | 147,068 | 72,683 | 144,297 | 6,150 | 150,447 | | 12,018 | 343,827 | | 11.500 |
| | | | | | | | | | | | | | |

^{1/} Recoverable zinc content of ores and concentrates produced, and of old tailings, mine dumps, and smelter slag dumps reclaimed.

^{2/} Zinc recovered in all forms from all types of scrap. Final totals for 1960-61 were distributed by quarters on the basis of preliminary monthly data for the aggregate quantity of secondary slab zinc produced and recoverable zinc content of zinc-base, copper-base, aluminum-base, and magnesium-base scrap consumed. Quarterly data for 1962 were estimated as equivalent to 99.7 percent of the quarterly aggregates of the preliminary monthly data; this is the ratio of the final to the preliminary total for 1961.

^{3/} As reported by the American Zinc Institute. Represents gross weight of zinc blocks, pigs, and slabs at primary and secondary smelters and refineries. Data for 1953-57 represent average of year-end stocks.

^{4/} Total stocks of slab zinc. Data for 1953-57 represent average of year-end stocks.

^{5/} Zinc content of zinc-bearing ores and concentrates and the gross weight of zinc blocks, pigs, slabs, scrap, dross, and skimmings. Imports of zinc flume are not included. Data for 1960-62 are preliminary.

^{6/} Zinc content of zinc ores, concentrates, scrap, dross, and skimmings, and the gross weight of zinc blocks, pigs, and slabs. Data for 1960-62 are preliminary.

^{7/} Slab zinc consumed, the zinc content of ores consumed directly in the manufacture of zinc pigments and chemicals, and the recoverable zinc in all forms of old and new zinc-bearing scrap (with the zinc content of redistilled and remelt zinc subtracted to eliminate duplication) as reported to the U.S. Bureau of Mines. These data do not include withdrawals for Government stockpiles. Data for 1961 and 1962 are preliminary.

^{8/} Average price of Prime Western Zinc at East St. Louis as published by E & MJ Metal and Mineral Markets.

Source: Production, consumers' stocks, and consumption, from official statistics of the U.S. Bureau of Mines, except as noted; producers' stocks, from the American Zinc Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce; prices, from E & MJ Metal and Mineral Markets.

Table 7.—Lead and zinc: Mine output, smelter output of primary metal, and consumption of primary metal in the United States, and in the world, average 1953-57, annual 1958-61

(Mine and primary smelter output and consumption in thousands of short tons)

| Period | Mine output | | | Primary smelter output | | | Consumption of primary metal | | | Ratio (percent) of | | |
|-----------------|---------------|--------|---------|------------------------|-------|---------------|------------------------------|---------------|-------|--------------------|---------|-------------------------|
| | United States | United | Outside | United | World | United | Outside | United | World | United | Smelter | United States to world— |
| | | States | States | States | 2/ | United States | 2/ | United States | 5/ | United States | output | Consumption |
| Lead | | | | | | | | | | | | |
| Average 1953-57 | 239 | 2,047 | 2,386 | 502 | 1,785 | 2,287 | 761 | 1,491 | 2,252 | 14.2 | 22.0 | 33.8 |
| Annual: | | | | | | | | | | | | |
| 1958 | 267 | 2,323 | 2,590 | 469 | 2,031 | 2,500 | 707 | 1,707 | 2,414 | 10.3 | 18.8 | |
| 1959 | 256 | 2,304 | 2,560 | 341 | 2,069 | 2,410 | 672 | 1,836 | 2,508 | 10.0 | 14.1 | 29.3 |
| 1960 | 247 | 2,363 | 2,610 | 382 | 2,168 | 2,550 | 582 | 1,971 | 2,553 | 9.5 | 15.0 | 26.8 |
| 1961 | 262 | 2,398 | 2,660 | 450 | 2,210 | 2,660 | 696 | 1,995 | 2,691 | 9.8 | 16.9 | 22.8 |
| | | | | | | | | | | | | 25.9 |
| Zinc | | | | | | | | | | | | |
| Average 1953-57 | 522 | 2,672 | 3,194 | 930 | 1,976 | 2,906 | 987 | 1,746 | 2,733 | 16.3 | 32.0 | 36.1 |
| Annual: | | | | | | | | | | | | |
| 1958 | 412 | 2,948 | 3,360 | 781 | 2,229 | 3,010 | 868 | 2,074 | 2,942 | 12.3 | | |
| 1959 | 425 | 2,955 | 3,380 | 799 | 2,321 | 3,120 | 956 | 2,220 | 3,176 | 12.6 | 25.9 | 29.5 |
| 1960 | 435 | 3,155 | 3,590 | 800 | 2,480 | 3,280 | 878 | 2,432 | 3,310 | 12.1 | 24.4 | 30.1 |
| 1961 | 464 | 3,256 | 3,720 | 847 | 2,703 | 3,550 | 909 | 2,564 | 3,473 | 12.5 | 23.9 | 26.5 |
| | | | | | | | | | | | | 26.2 |

1/ Recoverable content of ores and concentrates produced.

2/ Partly estimated; data represent principally lead or zinc content of ores and concentrates produced.

3/ For lead, refined lead from domestic and foreign ores; refined lead produced from foreign base bullion not included. For zinc, primary slab zinc from both domestic and foreign ores.

4/ Partly estimated; includes some production from scrap.

5/ For lead, data do not include tonnages which went to the Government permanent stockpile; data represent mostly primary lead, although a small amount of secondary lead may be included. For zinc, data represent consumption of slab zinc as reported by the U.S. Bureau of Mines.

6/ Partly estimated; includes some consumption of secondary metal.

Source: Mine and smelter output, compiled from official statistics of the U.S. Bureau of Mines; consumption, from American Bureau of Metal Statistics, except as noted.

Table 8.--Unmanufactured lead and zinc: U.S. production, commercial imports for consumption, domestic exports, and industrial consumption, average 1953-57, annual 1958-61, January-June 1961, and January-June 1962

| Item | Average | 1958 | 1959 | 1960 | 1961 | Jan.- | Jan.- |
|---|---------|---------|---------|---------|---------|-------|-------|
| | 1953-57 | | | | | June | June |
| Lead (lead content) | | | | | | | |
| U.S. production 1/-----: | 832.6 | 669.2 | 707.0 | 716.6 | 714.7 | 361.8 | 347.2 |
| Commercial imports-----: | 443.4 | 529.2 | 347.1 | 354.2 | 354.7 | 177.4 | 171.2 |
| Domestic exports-----: | 5.9 | 3.4 | 4.1 | 5.8 | 11.7 | 4.3 | 3.3 |
| Industrial consumption-----: | 1,171.4 | 986.4 | 1,091.1 | 1,021.2 | 1,027.2 | 501.5 | 532.7 |
| Ratio (percent) of com- mercial imports to indus- trial consumption-----: | 37.9 | 53.6 | 31.8 | 34.7 | 34.5 | 35.4 | 32.1 |
| Zinc (zinc content) | | | | | | | |
| U.S. production 2/-----: | 805.3 | 642.3 | 701.6 | 701.2 | 702.4 | 358.1 | 377.1 |
| Commercial imports 3/-----: | 651.3 | 661.2 | 514.1 | 501.6 | 479.8 | 234.1 | 257.2 |
| Domestic exports-----: | 28.3 | 7.4 | 23.0 | 87.3 | 57.6 | 35.1 | 22.7 |
| Industrial consumption-----: | 1,309.4 | 1,142.2 | 1,278.4 | 1,158.9 | 1,207.5 | 567.9 | 698.2 |
| Ratio (percent) of com- mercial imports to indus- trial consumption-----: | 49.7 | 57.9 | 40.2 | 43.3 | 39.7 | 41.2 | 36.8 |

1/ Mine output of recoverable lead plus lead recovered from all types of old and new scrap.

2/ Mine output of recoverable zinc plus zinc recovered in all forms from all types of old and new scrap.

3/ Zinc content of zinc-bearing ores plus gross weight of zinc blocks, pigs, slabs, scrap, dross, and skimmings.

Source: For lead, compiled from data on production, exports and consumption given in table 5, and from data on commercial imports (using Treasury Department data for period beginning Oct. 1, 1958) in table 3. For zinc, compiled from data on production, exports, and consumption given in table 6, and from data on commercial imports (using Treasury Department data for the period beginning Oct. 1, 1958) in table 4.

Table 9.—Lead and zinc mining and milling in the United States: Average number of all employees, average number of production and related workers, wages paid, and man-hours worked, 1956 and 1958-61.^{1/}

| Year | Average number of production and related workers, and proprietors and firm members per-forming manual labor ^{2/} | | | Production and related workers ^{3/} ^{4/} | | | Production and related workers ^{3/} ^{4/} | | |
|------|---|--------------------------------|------------------|--|-------------------------------|-------------------------------|--|------------------------------|---|
| | Total employees ^{2/} | Production and related workers | | Total wages paid ^{5/} | Total man-hours | Average wages paid per hour | Total wages paid ^{5/} | Total man-hours | Average wages paid per hour |
| | | Total | and firm members | wages paid ^{5/} | Actually worked ^{6/} | Actually worked ^{6/} | Total ^{7/} | Actualy worked ^{6/} | Hours actually worked per man per month ^{8/} |
| 1956 | 16,845 | 14,457 | 14,251 | 206 | 66,595 | 30,351 | 2/ | \$2.19 | 2/ |
| 1958 | 10,500 | 8,631 | 8,566 | 65 | 38,089 | 16,357 | 17,430 | 2.33 | \$2.19 |
| 1959 | 9,893 | 8,248 | 8,155 | 93 | 38,008 | 15,985 | 16,928 | 2.38 | 2.25 |
| 1960 | 9,430 | 7,872 | 7,752 | 120 | 37,207 | 15,308 | 16,228 | 2.43 | 2.29 |
| 1961 | 9,312 | 7,903 | 7,803 | 100 | 37,695 | 15,459 | 16,345 | 2.44 | 2.31 |
| | | | | | | | | | |

^{1/} Data are for operations engaged in producing ores or concentrates in which the value of recoverable lead-plus-zinc content was greater than the value of any other single metal contained, and for nonproducing lead and zinc operations engaged in maintenance, development, and construction work. Operations which were engaged in producing lead and zinc ores and concentrates (as defined above) and which reported to the U.S. Tariff Commission, accounted for the following percentages of total production of recoverable lead and zinc from ores or concentrates valued chiefly for their lead-plus-zinc content:

| Year | Lead | Zinc |
|------|------|------|
| 1956 | 99.1 | 99.3 |
| 1958 | 96.7 | 98.3 |
| 1960 | 99.7 | 99.8 |

^{2/} Data are adjusted to account for unreported operations.

^{3/} Data have not been adjusted to account for unreported operations.

^{4/} Companies were instructed to report as production and related workers those employees who were engaged directly in production, and other employees engaged in development, exploration, maintenance, repair, shipping, powerplant, recordkeeping, and related activities, excluding officers, proprietors, partners, supervisory employees (above the working-foreman level), technical employees, salesmen, general office workers, and force-account construction workers utilized as a separate work force. The average number of workers was calculated for each year by dividing the total of the actual number of workers reported on payroll in pay period ending nearest the 15th of each month of the year by 12.

^{5/} Companies were instructed that wages paid production and related workers should be their gross earnings before deductions were made for employees' contributions for old-age and unemployment insurance, withholding tax, bonds, union dues, etc., but after deductions for cost of smelting, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages. In addition, they were instructed that wages paid should include pay for sick leave, holidays, and vacations taken, but should not include cash payments for vacations not taken, retroactive pay not earned during the month reported, company contributions to welfare funds and insurance or pension plans, and bonuses—unless the bonuses were earned and paid regularly each month.

^{6/} Companies were instructed that man-hours reported should represent the hours for which wages (as defined in footnote 5) were paid, except that they should exclude hours paid for holidays, sick leave, and vacations taken. They were further instructed not to convert overtime hours to equivalent straight-time hours.

^{7/} Includes man-hours paid for holidays, sick leave, and vacations taken.

^{8/} Computed from unrounded figures.

^{9/} Comparable data not available.

Source: Compiled from reports to the U.S. Tariff Commission submitted by companies engaged in lead and zinc mining and milling.

Table 10.--Lead metal: Average monthly market prices at New York City and at London,
January 1959-August 1962 1/

| (In cents per pound) | | | | | | | | | |
|----------------------|-------------------------------|--------------------------------|--|----------------|-------------------------------|--------------------------------|--|--|--|
| Year and month | New York price of Common lead | London Metal Exchange price 2/ | Difference, New York price minus London price 3/ | Year and month | New York price of Common lead | London Metal Exchange price 2/ | Difference, New York price minus London price 3/ | | |
| 1959: | | | | 1961: | | | | | |
| January-----: | 12.667 | 8.981 | 3.686 | January-----: | 11.000 | 7.975 | 3.025 | | |
| February-----: | 11.560 | 8.746 | 2.814 | February-----: | 11.000 | 8.167 | 2.833 | | |
| March-----: | 11.412 | 8.689 | 2.723 | March-----: | 11.000 | 8.242 | 2.758 | | |
| April-----: | 11.189 | 8.631 | 2.558 | April-----: | 11.000 | 8.384 | 2.616 | | |
| May-----: | 11.897 | 8.850 | 3.047 | May-----: | 11.000 | 8.330 | 2.670 | | |
| June-----: | 12.000 | 8.708 | 3.292 | June-----: | 11.000 | 8.087 | 2.913 | | |
| July-----: | 12.000 | 8.781 | 3.219 | July-----: | 11.000 | 8.107 | 2.893 | | |
| August-----: | 12.286 | 9.180 | 3.106 | August-----: | 11.000 | 8.086 | 2.914 | | |
| September----: | 13.000 | 8.840 | 4.160 | September----: | 11.000 | 7.999 | 3.001 | | |
| October-----: | 13.000 | 8.827 | 4.173 | October-----: | 11.000 | 7.828 | 3.172 | | |
| November----: | 13.000 | 9.018 | 3.982 | November----: | 10.203 | 7.548 | 2.655 | | |
| December----: | 12.523 | 9.087 | 3.436 | December----: | 10.250 | 7.559 | 2.691 | | |
| 1960: | | | | 1962: | | | | | |
| January-----: | 12.000 | 9.348 | 2.652 | January-----: | 10.034 | 7.388 | 2.646 | | |
| February-----: | 12.000 | 9.233 | 2.767 | February-----: | 9.583 | 7.335 | 2.248 | | |
| March-----: | 12.000 | 9.533 | 2.467 | March-----: | 9.500 | 7.576 | 1.924 | | |
| April-----: | 12.000 | 9.690 | 2.310 | April-----: | 9.500 | 7.559 | 1.941 | | |
| May-----: | 12.000 | 9.676 | 2.324 | May-----: | 9.500 | 7.477 | 2.023 | | |
| June-----: | 12.000 | 9.172 | 2.828 | June-----: | 9.500 | 7.215 | 2.285 | | |
| July-----: | 12.000 | 8.905 | 3.095 | July-----: | 9.500 | 6.726 | 2.774 | | |
| August-----: | 12.000 | 8.869 | 3.131 | August-----: | 9.500 | 6.381 | 3.119 | | |
| September---: | 12.000 | 8.743 | 3.257 | | | | | | |
| October-----: | 12.000 | 8.406 | 3.594 | | | | | | |
| November----: | 12.000 | 8.522 | 3.478 | | | | | | |
| December----: | 11.381 | 8.122 | 3.259 | | | | | | |

1/ Changes in the average daily prices in the United States since Jan. 1, 1959, were as follows (in cents per pound):

| Date of change | New price | Date of change | New price | Date of change | New price |
|----------------|-----------|-----------------|-----------|----------------|-----------|
| 1959: | | 1959--Continued | | 1961: | |
| Jan. 22-----: | 12.000 | Apr. 21-----: | 11.500 | Nov. 1-----: | 10.500 |
| Feb. 11-----: | 11.500 | May 7-----: | 11.830 | Nov. 13-----: | 10.000 |
| Feb. 20-----: | 11.073 | May 8-----: | 12.000 | Nov. 28-----: | 10.250 |
| Feb. 24-----: | 11.000 | Aug. 24-----: | 13.000 | 1962: | |
| Mar. 5-----: | 11.059 | Dec. 14-----: | 12.500 | Jan. 5-----: | 10.000 |
| Mar. 6-----: | 11.500 | Dec. 21-----: | 12.000 | Feb. 1-----: | 9.750 |
| Apr. 1-----: | 11.000 | 1960: | | Feb. 9-----: | 9.500 |
| Apr. 20-----: | 11.155 | Dec. 13-----: | 11.000 | | |

2/ Average of daily mean of bid and ask quotations for prompt lead at the morning session of the London Metal Exchange. Quotations in pounds sterling per long ton were converted to U.S. cents per pound, at the rate of 1 pound sterling=\$2.80.

3/ In September 1962 the cost of transportation and insurance from London to New York City plus the U.S. import duty of 1-1/16 cents per pound amounted to about 2.1 cents per pound.

Source: E & MJ Metal and Mineral Markets.

Note.--The daily quotations are based on sales on a flat-price basis of domestically refined lead sold to domestic consumers. The daily averages are weighted by the quantity of such sales. The price quotations reflect sales of all grades of lead sold converted to the basis of Common lead at New York. On Apr. 1, 1962, Chemical grade commanded a premium of 0.1 cent per pound over the Common and Corroding grades.

Table 11.--Prime Western zinc: Average monthly market prices in the United States and at London, January 1959-August 1962 1/

| Year and month | (In cents per pound) | | | | | | | | | | | |
|----------------|----------------------|-----------|-------------------|-----------------------------|----------------|----------------|-----------|-------------------|----------------------|-------|--|--|
| | F.o.b. | Delivered | London Metal | Difference, New York | Year and month | F.o.b. | Delivered | London Metal | Difference, New York | | | |
| | East | New York | Exchange price 3/ | price minus London price 4/ | St.Louis2/ | East | New York | Exchange price 3/ | London price 4/ | | | |
| 1959: | | | | | | | | | | | | |
| January----- | 11.500 | 12.000 | 9.360 | 2.640 | 1961: | January----- | 11.529 | 12.029 | 9.904 | 2.125 | | |
| February----- | 11.417 | 11.917 | 9.210 | 2.707 | | February----- | 11.500 | 12.000 | 10.345 | 1.655 | | |
| March----- | 11.000 | 11.500 | 9.390 | 2.110 | | March----- | 11.500 | 12.000 | 10.572 | 1.428 | | |
| April----- | 11.000 | 11.500 | 9.086 | 2.414 | | April----- | 11.500 | 12.000 | 10.489 | 1.511 | | |
| May----- | 11.000 | 11.500 | 9.669 | 1.831 | | May----- | 11.500 | 12.000 | 10.299 | 1.701 | | |
| June----- | 11.000 | 11.500 | 9.801 | 1.699 | | June----- | 11.500 | 12.000 | 9.880 | 2.120 | | |
| July----- | 11.000 | 11.500 | 10.066 | 1.434 | | July----- | 11.500 | 12.000 | 9.737 | 2.263 | | |
| August----- | 11.000 | 11.500 | 10.662 | .838 | | August----- | 11.500 | 12.000 | 9.559 | 2.441 | | |
| September----- | 11.334 | 11.834 | 10.759 | 1.075 | | September----- | 11.500 | 12.000 | 9.243 | 2.757 | | |
| October----- | 12.129 | 12.629 | 11.421 | 1.208 | | October----- | 11.500 | 12.000 | 8.986 | 3.014 | | |
| November----- | 12.500 | 13.000 | 11.867 | 1.133 | | November----- | 11.500 | 12.000 | 8.696 | 3.304 | | |
| December----- | 12.500 | 13.000 | 11.899 | 1.101 | | December----- | 11.975 | 12.475 | 8.920 | 3.555 | | |
| 1960: | | | | | | | | | | | | |
| January----- | 12.877 | 13.377 | 11.822 | 1.555 | 1962: | January----- | 12.000 | 12.500 | 8.777 | 3.723 | | |
| February----- | 13.000 | 13.500 | 11.107 | 2.393 | | February----- | 12.000 | 12.500 | 8.598 | 3.902 | | |
| March----- | 13.000 | 13.500 | 11.270 | 2.230 | | March----- | 12.000 | 12.500 | 8.669 | 3.831 | | |
| April----- | 13.000 | 13.500 | 11.554 | 1.946 | | April----- | 11.500 | 12.000 | 8.678 | 3.322 | | |
| May----- | 13.000 | 13.500 | 11.512 | 1.988 | | May----- | 11.500 | 12.000 | 8.555 | 3.445 | | |
| June----- | 13.000 | 13.500 | 11.324 | 2.176 | | June----- | 11.500 | 12.000 | 8.374 | 3.626 | | |
| July----- | 13.000 | 13.500 | 11.279 | 2.221 | | July----- | 11.500 | 12.000 | 8.263 | 3.737 | | |
| August----- | 13.000 | 13.500 | 10.929 | 2.571 | | August----- | 11.500 | 12.000 | 8.073 | 3.927 | | |
| September----- | 13.000 | 13.500 | 10.892 | 2.608 | | | | | | | | |
| October----- | 13.000 | 13.500 | 10.989 | 2.511 | | | | | | | | |
| November----- | 13.000 | 13.500 | 10.954 | 2.546 | | | | | | | | |
| December----- | 12.476 | 12.976 | 10.345 | 2.631 | | | | | | | | |

1/ Changes in the daily average prices in the United States since Jan. 1, 1959, were as follows (in cents per pound):

| Date of change | New price | Date of change | New price | Date of change | New price |
|----------------|-----------|-----------------|-----------|----------------|-----------|
| 1959: | : | 1959--Continued | : | 1961: | : |
| Feb. 25----- | 11.000 | Oct. 30----- | 12.563 | Jan. 10----- | 11.500 |
| Sept. 21----- | 11.005 | Nov. 2----- | 12.500 | Dec. 1----- | 11.506 |
| Sept. 22----- | 12.000 | 1960: | : | Dec. 4----- | 12.000 |
| Oct. 22----- | 12.002 | Jan. 8----- | 12.532 | 1962: | : |
| Oct. 23----- | 12.039 | Jan. 11----- | 13.000 | Apr. 2----- | 11.500 |
| Oct. 26----- | 12.500 | Dec. 13----- | 12.500 | | |
| Oct. 29----- | 12.612 | Dec. 19----- | 12.000 | | |

2/ Prime Western zinc is also sold on a delivered basis (in addition to f.o.b. East St. Louis basis); the delivered price ranges from 1/4 to 1/2 cent per pound above the East St. Louis price. The delivered price is 1/2 cent above the East St. Louis price where freight from East St. Louis exceeds 1/2 cent per pound (freight from East St. Louis to New York City exceeds 1/2 cent per pound).

3/ Average of daily mean of bid and ask quotations for Good Ordinary brands (equivalent to U.S. Prime Western grade) per pound for prompt delivery at morning session of London Metal Exchange. Quotations in pounds sterling per long ton were converted to U.S. cents per pound, at the rate of 1 pound sterling=\$2.80.

4/ In September 1962 the cost of transportation and insurance from London to New York City, plus the U.S. import duty (7/10 cent per pound), amounted to about 1.8 cents per pound.

Source: E & MJ Metal and Mineral Markets.

Note.--The daily quotations are prices at which slab zinc was sold on a flat-price basis by primary producers in the United States, weighted by quantities sold. The price quotations reflect sales of all grades of zinc sold, converted to the basis of Prime Western zinc f.o.b. East St. Louis. At the end of 1961, other grades of zinc commanded the following premiums over the Prime Western grade (in cents per pound): Selected, 0.10 cent; Brass Special, 0.20 cent; Intermediate, 0.20 cent; High grade (sold on contract delivered to consumers' plants), 0.85 cent; Special High grade (sold on contract delivered to consumers' plants), 1.0 cent. During various periods, however, premiums have been nominal.

Table 12.--Lead: Producers' stocks, by kinds, at primary smelters and refineries in the United States, average of year-end stocks, 1953-57, at the end of each year, 1958-61, and at the end of July 1961 and July 1962

| (In short tons) | | | | | | |
|----------------------|--|----------------------------------|--------------------------------|-------------------------------|--------------------------------------|---------------------|
| Period or date | In ores and mattes and in process at smelters (lead content) | In base bullion (lead content)-- | In process at refineries | Pig lead (gross weight) | Refined lead (gross weight) | Antimonial Total |
| Average 1953-57----- | 71,771 | 15,173 | 2,796 | 25,950 | 54,667 | 12,880 |
| At end of-- | | | | | | |
| 1958----- | 72,378 | 10,917 | 1,767 | 19,746 | 185,913 | 12,595 |
| 1959----- | 73,381 | 16,955 | 3,085 | 16,914 | 108,002 | 11,991 |
| 1960----- | 89,502 | 30,852 | 887 | 24,451 | 149,034 | 11,115 |
| 1961----- | 65,877 | 17,289 | 190 | 19,489 | 198,423 | 11,134 |
| July 1961----- | 80,488 | 16,116 | 338 | 22,698 | 183,411 | 12,060 |
| July 1962----- | 67,914 | 9,590 | 623 | 18,394 | 184,146 | 7,948 |
| | | | | | | |

Source: Compiled from data supplied the U.S. Tariff Commission by the American Bureau of Metal Statistics.

Table 13.--Zinc in ore and other zinciferous materials: Indexes of stocks held at zinc smelters in the United States, average of year-end stocks, 1953-57, at the end of each year, 1958-61, and at the end of June 1961 and June 1962

| (Stocks at end of 1951=100 1/) | | | | |
|--------------------------------|-----------------------------|-------------|-----------------------------|-------|
| Date | Zinc content of stocks of-- | | | |
| | Domestic ore | Foreign ore | Other zinciferous materials | Total |
| | | | | |
| Average 1953-57-----: | 125.9 | 157.8 | 204.2 | 141.9 |
| At end of-- | : | : | : | : |
| 1958-----: | 51.7 | 190.6 | 278.0 | 116.0 |
| 1959-----: | 57.0 | 190.0 | 364.1 | 122.5 |
| 1960-----: | 114.1 | 197.2 | 377.4 | 158.2 |
| 1961-----: | 104.2 | 181.4 | 247.6 | 140.7 |
| June 1961-----: | 113.1 | 166.5 | 370.6 | 145.4 |
| June 1962-----: | 84.5 | 165.2 | 274.0 | 124.4 |

1/ Index numbers are based on data compiled by the American Zinc Institute, Inc., which represented stocks of zinc ore (including sinter) and of other zinciferous materials held at smelters, at electrolytic plants, and in storage in the United States, suitable for the manufacture of metal, regardless of ownership, and including any Government-owned stocks, but excluding material in the operating circuit; data exclude stocks at mines and at old-slab and residue piles or dumps, and material that is awaiting conversion into pigments and is suitable and definitely earmarked for that purpose. Data on actual tonnages of zinc-ore stocks may not be published; permission was granted the U.S. Tariff Commission by the American Zinc Institute, however, to publish such data in terms of index numbers which reflect changes in stocks.

Source: Compiled from data supplied the U.S. Tariff Commission by the American Zinc Institute, Inc.

Table 14.--Slab zinc: Producers' primary and secondary stocks in the United States, by standard grades, average of yearend stocks in 1953-57, at the end of each year, 1958-61, and at the end of July 1961 and July 1962

| Period or date | (In short tons) | | | | | Total 2/ |
|-----------------------|--------------------------|---------------|--------------|---------------------|--|----------|
| | Special high grade | High grade | Intermediate | Prime Western 1/ | | |
| Average 1953-57-----: | 28,310 | 17,658 | 2,355 | 67,953 | | 116,276 |
| At end of-- | | | | | | |
| 1958-----: | 52,921 | 9,236 | 3,874 | 124,206 | | 190,237 |
| 1959-----: | 12,512 | 4,442 | 1,928 | 135,537 | | 154,419 |
| 1960-----: | 61,627 | 12,268 | 4,400 | 112,515 | | 190,810 |
| 1961-----: | 75,953 | 6,226 | 1,868 | 67,142 | | 151,189 |
| July 1961-----: | 102,440 | 10,719 | 1,941 | 91,504 | | 206,604 |
| July 1962-----: | 69,369 | 8,565 | 3,747 | 80,735 | | 162,416 |

1/ Including Select and Brass Special grades.

2/ Excludes stocks held at points other than at smelters. Such stocks at the end of the period indicated were as follows: 1957--15,643 tons; 1958--17,534 tons; 1959--29,859 tons; 1960--22,441 tons; 1961--21,397 tons; and July 1962--35,174 tons.

Source: Compiled from data supplied the U.S. Tariff Commission by the American Zinc Institute, Inc.