

LEAD INDUSTRY IN 1958 AND FIRST SIX MONTHS OF 1959

Source: U.S.B.M. Mineral Market Reports

YEAR 1958

For a report on the lead industry in 1958, see the U.S.B.M. Mineral Market Report, M.M.S. No. 2939 *

U.S. LEAD INDUSTRY MONTHLY LEAD REPORT NO. 133, FOR JANUARY, 1959

New supply of lead in January totaled 96,500 short tons and 88,400 tons was consumed, according to the Bureau of Mines, United States Department of the Interior. Primary refineries produced 40,100 tons of refined lead and 3,400 tons of lead in antimonial lead; secondary lead and copper smelters reclaimed 36,000 tons; and 17,000 tons of pigs and bars (approximately half of the first quarter's quota) was imported in January. Mine production increased 8 percent over December to total 23,500 tons of recoverable lead, and there was a 1-cent reduction in the New York price of common lead -- from 13 cents to 12 cents -- on January 21.

Primary refiners' output of refined lead (40,100 tons) was the highest since June, 1958, and exceeded shipments by 11,000 tons. The excess increased producers' stocks of refined lead to nearly 200,000 tons of which 123,000 tons was accumulated in 1958. Production, shipments and stocks of antimonial lead varied only slightly from preceding months.

Secondary and primary lead smelters consumed 53,000 tons of lead-base and 400 tons of tin-base scrap in January -- an increase of 11 percent over December. Of the total consumed, battery lead plates accounted for 57 percent, solid metal scrap for 22 percent, and drosses and residues for the remaining 21 percent. Stocks of lead-base scrap declined 10 percent during the month to 49,200 tons and stocks of tin-base declined 6 percent to 700 tons on January 31. All items of scrap (except cable covering) contributed to this decrease in inventory during January.

Recovery of secondary lead, tin, and antimony totaled 36,000 tons, or 5 percent more than was recovered in December. Of the metal reclaimed, 33,800 tons was lead, 800 tons tin, and 1,400 tons antimony. Primary smelters reclaimed 2,800 tons of the lead and 100 tons of the antimony and the remainder was recovered by the secondary smelters.

General imports of lead in January included 18,000 tons of ores and concentrates, 17,000 tons of pigs and bars and 1,000 tons of reclaimed metal and scrap -- a total of 36,000 tons. Australia and Peru supplied 69 percent of the ore and Australia, Mexico, and Yugoslavia 67 percent of the pigs and bars. According to the Customs Bureau data, first quarter quotas for several countries were completely filled in January and all together constituted about 44 percent of total first quarter quotas.

* Also for an exhaustive study of the lead industry and its outlook, the reader is referred to the American Metal Market of March 14, 1959, Section 3, pages 26-29.

Consumers used 5 percent more lead in January than in December. Production of tetraethyl fluid increased 37 percent over December and was the highest since December 1957; consumption in battery production increased 3 percent and in cable covering decreased 15 percent. Use of lead in solder exceeded that consumed in cable covering in January.

Stocks of lead at consumer and secondary smelter plants increased 2 percent during the month to 118,100 tons. Refined lead inventories were higher on January 31 by a thousand tons (2 percent) and antimonial lead by 1,500 tons (4 percent) than on January 1.

U. S. LEAD INDUSTRY MONTHLY LEAD REPORT NO. 134, FOR FEBRUARY, 1959

Domestic production and imports of lead totaled 87,300 short tons in February, and 84,200 tons was consumed, according to the Bureau of Mines, United States Department of the Interior. Primary lead refineries supplied 35,100 tons of refined lead and 4,100 tons of lead in antimonial lead; secondary smelters recovered 33,500 tons; and 14,600 tons of pigs and bars was imported. Mine production of recoverable lead in February dropped 8 percent below January to 21,600 tons. The New York price of common lead was reduced 1/2 cent per pound to 11.50 cents on February 11 and to 11.00 cents on February 24.

In February -- for the fourth consecutive month -- primary refiners' production of refined lead exceeded their shipments to consumers. The addition of about 6,000 tons raised producers' stocks to 203,000 tons on February 28. Antimonial lead shipments were also less than the quantity produced and stocks increased 3 percent.

Receipts of lead-base scrap at secondary and primary smelters were 13 percent lower than in January. Smelters treated 50,100 tons -- 6 percent less than was consumed in the preceding month. Battery lead plates accounted for three-fifths of the lead-base scrap melted. Smelters of battery plates drew approximately 9,000 tons from inventory, thereby reducing stock of this item to 20,300 tons by February 28. Total stocks of all lead-base scrap declined 18 percent to 40,300 tons during the month. Receipts and consumption of tin-base scrap were slightly less than in January and stocks decreased 6 percent.

Recovery of secondary metals -- lead, tin, and antimony -- at lead smelters totaled 33,900 tons, a 6-percent decrease from January. Of the metal reclaimed, 31,800 tons was lead, 800 tons tin, and 1,300 tons antimony. Primary smelters recovered 3,400 tons of the lead and 128 tons of the antimony and secondary smelters recovered the remainder.

General imports of lead in February totaled 24,600 tons -- 32 percent under the 36,000 tons imported in January. Of February imports, 10,000 tons was in ore and concentrates and came principally from Canada and Peru. Pigs and bars accounted for 14,600 tons with Mexico, Peru, Australia, and Yugoslavia supplying 84 percent of the total. January and February imports for consumption filled approximately 77 percent of first quarter import quotas.

Consumers' use of lead dropped 5 percent below January because of the shorter work month as the daily average use was 155 tons higher than in January. Most of the larger lead-consuming items contributed to the decrease; consumption in cable lead was down 7 percent, in batteries - 10 percent, and in

tetraethyl lead the decrease was 26 percent. Of all lead consumed during the month, 72 percent went to the manufacture of metal products, 11 percent was used in pigments, 15 percent in chemicals (including tetraethyl fluid) and 2 percent in miscellaneous and unclassified products.

Consumers' stocks of lead decreased 3 percent in February or about 4,000 tons. Stocks of soft lead and lead in copper-base scrap each declined 6 percent, but increased inventories were reported in antimonial lead and lead in other alloys.

U. S. LEAD INDUSTRY MONTHLY LEAD REPORT NO. 135, FOR MARCH, 1959

New supply of lead in the United States totaled 105,700 short tons in March and 85,100 tons was consumed, according to the Bureau of Mines, United States Department of the Interior. Primary refineries produced 35,000 tons of refined lead and 3,900 tons of lead in antimonial lead; secondary lead and copper smelters reclaimed 32,000 tons; and 34,800 tons of pigs and bars was imported. Mine production of recoverable lead (21,100 tons) was slightly less than in February.

A half-cent increase on March 5 brought the quoted New York price of common lead to 11.50 cents a pound where it remained until April 1.

Reversing the trend of past months, primary producers shipped more refined lead and antimonial lead than they produced in March. Production of 35,000 tons of refined lead and shipment of 39,500 tons decreased refinery stocks 2 percent to 198,400 tons -- the first inventory reduction since October 1958. Antimonial lead inventories were also slightly lower at the end of the month.

Consumption of lead-base and tin-base scrap at secondary and primary lead smelters totaled 43,200 tons -- a decrease of 14 percent compared with February. Smelters treated 23,000 tons of battery lead plates which accounted for 53 percent of all scrap melted. Stocks of lead-base scrap decreased 7 percent during the month to 37,400 tons. Inventories of tin-base scrap rose 9 percent to a total 700 tons on March 31.

From the scrap consumed in March, 31,300 tons of secondary metals was recovered -- 29,400 tons of lead, 700 tons of tin, and 1,200 tons of antimony. Recovery was 8 percent lower than in February. Primary lead smelters reclaimed 2,400 tons of the lead and 34 tons of the antimony and secondary lead smelters recovered the remainder.

General imports in March totaled 56,500 tons, almost half of the first quarter total of lead. Of the lead imported in March, 62 percent was pigs and bars, about one-third of which came from Mexico and lesser but nearly equal quantities from Canada, Spain, Yugoslavia and Australia. Peru supplied 35 percent of the ore imported, Union of South Africa 25 percent, and Bolivia 17 percent. Imports for consumption totaled 44,800 tons in March.

Consumers used 85,100 tons of lead in March compared with 84,200 tons in February. However, the daily rate of consumption was almost 300 tons less in March. Lead used in cable covering and tetraethyl fluid increased 18 and 6 percent, respectively, and declined 4 percent in battery production. Of the lead consumed in March (excluding that recovered from scrap which went directly to

end products and that in ore which went to leaded zinc oxide), 68 percent was refined soft lead, 25 percent was in antimonial lead, and the remaining 7 percent was in various alloys and copper-base scrap.

Consumers' and secondary smelters' stocks of lead in refinery shapes increased 8 percent or almost 10,000 tons during the month. All of the inventory increase was in refined lead, with all other classes showing small decreases.

U.S. LEAD INDUSTRY MONTHLY LEAD REPORT NO. 136, FOR APRIL, 1959

In April, new supply of lead in the United States totaled 99,600 short tons and 91,300 tons was consumed, according to the Bureau of Mines, United States Department of the Interior. Primary lead refineries supplied 35,000 tons of refined lead and 5,200 tons of lead in antimonial lead; secondary lead and copper smelters reclaimed 35,100 tons; and 24,300 tons of pigs and bars was imported. Mine production of recoverable lead was 21,300 tons or virtually the same as in March.

The price of common grade lead fell one-half cent to 11 cents per pound, New York, on April 1. On April 20, a one-half-cent rise restored the 11.5 cent price that was quoted the remainder of the month.

For the second consecutive month primary refineries shipped more refined lead than was produced. Production of 35,000 tons of refined lead equalled that produced in March, but refiners' shipments of 49,000 tons (the highest since September 1957) reduced stocks 7 percent during the month to 184,400 tons on April 30. Production of antimonial lead was higher than shipments thereby increasing stocks 11 percent -- from 12,000 tons on April 1 to 13,300 tons on April 30.

Receipts and consumption of lead-base scrap at primary and secondary lead smelters increased 9 and 7 percent, respectively, over March. Battery lead plates accounted for 52 percent of the 46,000 tons of scrap lead consumed, solid metal scrap for 26 percent, and drosses and residues for the remaining 22 percent. For the fourth consecutive month stocks continued their downward trend -- from 54,700 tons on January 1 to 34,800 tons at the close of April. Receipts and consumption of tin-base scrap were approximately 400 tons each during the month and closing stocks remained almost unchanged at 700 tons.

Recovery of secondary lead, tin, and antimony totaled 33,800 tons, an 8-percent gain over March. Of the reclaimed metal, 31,700 tons was lead, 800 tons tin, and 1,300 tons antimony. Primary smelters recovered 1,100 tons of the lead and 27 tons of the antimony and secondary smelters recovered the remainder.

General imports of lead in April were 34,000 tons; pigs and bars accounted for 71 percent, ores and concentrates for 27 percent, base bullion and reclaimed metal and scrap for the remaining 2 percent. Mexico supplied nearly one-half of the pigs and bars imported. Ores and concentrates came principally from the Union of South Africa, Australia, and Canada. Imports for consumption in April totaled 51,500 tons.

Consumption of 91,300 tons of lead in April represented a gain of 7 percent over March and was the highest consumption since October 1958. Lead used

in cable covering increased 7 percent and in tetraethyl lead 3 percent, but use of lead in storage batteries decreased 1 percent. The most significant increase in use of lead during April was consumption of 9,000 tons in white lead, red lead and litharge compared with 6,700 tons in March. Of the lead consumed during the month, 70 percent went to the manufacture of metal products, 15 percent was used in chemicals (including tetraethyl fluid), 12 percent in pigments, and 3 percent in miscellaneous and unclassified products.

Consumers' and secondary smelters' stocks of lead in refinery shapes remained almost unchanged at 124,000 tons on April 30.

U.S. LEAD INDUSTRY MONTHLY LEAD REPORT NO. 137, FOR MAY, 1959

Production and imports of lead totaled 109,600 short tons in May and 96,200 tons was consumed by industry, according to the Bureau of Mines, United States Department of the Interior. Primary producers supplied 34,500 tons of refined lead and 4,400 tons of lead in antimonial lead; secondary smelters recovered 34,500 tons and 36,200 tons in pigs and bars was imported. Mine production was 4 percent less than April production and 9 percent under the 1958 monthly average. A half-cent price increase occurred on May 7 raising the quoted price of common lead, New York, to 12.00 cents a pound.

Producers' shipments of refined lead were approximately 26,000 tons above production for the month, reducing refinery stocks substantially. Stocks of refined lead at these plants, which had reached a peak of 203,000 tons on February 28, were reduced to 158,000 tons by May 31. Production and shipments of antimonial lead were nearly equal with little change in inventories.

Secondary and primary lead smelters' receipts of lead-base scrap in May were 12 percent higher than in April. Smelters treated 46,300 tons or approximately the same quantity as in April. Battery lead plates accounted for 56 percent of the lead-base scrap consumed, solid metal scrap for 24 percent, and drosses and residues for 20 percent. The increase in receipts caused a moderate rise in stocks during the month -- from 34,800 tons at the beginning of May to 37,100 tons on May 31. Consumption of tin-base scrap was higher in May than in recent months -- 90 percent of which was dross and residues. Inventories of tin-base scrap decreased 16 percent to 600 tons at the close of the month.

From the scrap consumed in May, 33,300 tons of lead, tin and antimony was recovered -- a 2-percent decline compared with April. Secondary metals recovered consisted of 31,300 tons of lead, 800 tons of tin, and 1,200 tons of antimony. Primary lead smelters reclaimed 1,200 tons of the lead and 25 tons of the antimony and secondary smelters recovered the remainder.

General imports of lead totaled 40,900 tons in May. Of this total, 88 percent was pigs and bars, one-third of which came from Mexico, about one-fifth from Yugoslavia, and 15 percent each from Peru, Australia and Canada. Ore imports, which had averaged over 15,000 tons a month in the first quarter of the year, dropped to 4,500 tons in May with Canada supplying more than half. Imports of ore and pig lead for consumption for 2 months of the second quarter totaled 90,000 tons.

Consumers used 5 percent more lead in May than in April. Consumption increased 13 percent in batteries and 18 percent in tetraethyl lead but decreased 13 percent in cable covering. Lead used in the production of calking lead and in red lead and litharge exceeded that used in cable covering in both April and May. These 5 products took 69 percent of all lead consumed in May.

Whereas producers' stocks were reduced considerably in the 3 months, March-May, consumers' stocks increased 16 percent in the same period. In May consumers added 10 percent or about 8,000 tons to refined lead inventories and 2 percent or 800 tons to antimonial lead. Stocks of lead in alloys and in copper-base scrap both decreased.

U.S. LEAD INDUSTRY MONTHLY LEAD REPORT NO. 138, for JUNE, 1959

Approximately 97,600 short tons of lead was added to United States supply in June 1959 and 95,800 tons was consumed, according to the Bureau of Mines, United States Department of the Interior. Primary refineries produced 31,800 tons of refined soft lead and 5,300 tons of lead in antimonial lead; secondary smelters recovered 34,400 tons, and 26,100 tons of pigs and bars was imported. Mine production of recoverable lead increased slightly to 21,300 tons. The price of lead, on the basis of New York delivery, remained at 12 cents a pound.

Producers' shipments of refined lead in June again greatly exceeded production, reducing refinery stocks to the lowest level since March 31, 1958. About 82,000 tons of refined lead were moved from producers' stocks in the 4-month period, March through June. Primary refinery shipments of antimonial lead were also greater than production and stocks were 10 percent less at the end of the month.

Receipts of lead-base and tin-base scrap at secondary and primary lead smelters in June increased 4 percent over May. Smelters treated 46,000 tons of lead-and tin-base scrap or approximately the same quantity as in each of the two preceding months. Of the scrap consumed, battery lead plates accounted for 53 percent, solid metal scrap for 25 percent, and drosses and residues for the remaining 22 percent. Stocks of lead-base scrap rose 13 percent during the month to 41,800 tons on June 30.

Recovery of secondary lead, tin, and antimony totaled 32,500 tons -- a decline of 3 percent compared with May. Of the metal reclaimed, 30,500 tons was lead, 700 tons tin, and 1,300 tons antimony. Primary smelters recovered 600 tons of the lead and 17 tons of the antimony and the remainder was recovered by the secondary lead smelters.

General imports of lead totaled 231,600 tons in the first half of the year -- 28 percent below the 322,600 tons imported in the comparable period of 1958. In June, 66 percent of the lead imported was in pigs and bars, most of which came from Canada, Mexico, Australia, and Peru. Ore and concentrate accounted for 31 percent of imports and came principally from Peru, Union of South Africa, and Canada; the remaining 3 percent was scrap.

Consumers used 95,800 tons of lead in June -- a few hundred tons less than in May but at a higher daily rate. Battery production took 4 percent more lead than in May and tetraethyl 13 percent less. About 6,000 tons was consumed in cable covering but a greater quantity was used in calking lead, in red lead, and in solder. The 6 above-named products accounted for 76 percent of all lead consumed in June.

Consumers and secondary smelters' stocks of lead in refinery shapes increased 16 percent during the month and on June 30 were the highest ever recorded in this survey -- 153,900 tons. Stocks of refined lead increased by almost 20,000 tons and about 2,000 tons were added to antimonial lead stocks.

SALIENT U.S. LEAD STATISTICS FOR 1957, 1958 AND FIRST SIX MONTHS 1959

ARIZONA, UNITED STATES AND WORLD MINE PRODUCTION OF RECOVERABLE LEAD

Source: U.S.B.M.

Unit: Short Tons

	Year 1957	Year 1958	1st Six Mos. 1959
Producers' Stocks Beginning of Period	97,043	143,916	234,290
U.S.Mine Production Recoverable Lead	338,216	267,377	128,386
Secondary Lead Recovered From			
Old & New Scrap	489,229	401,787	205,390
Imported Lead in Ore & Matte, Base Bullion	197,915	202,088	73,501
Imported Lead in Pigs, Bars	324,279	368,452	153,036
Imported Lead in Reclaimed Scrap, etc.	9,247	6,570	5,024
TOTAL SUPPLY	1,455,929	1,390,190	799,627
Producers' Stocks at End of Period	143,916	234,290	133,189
Exported Lead in Ore,Matte & Base Bullion	906	1,012	212
Exported Lead in Pigs and Bars	4,339	1,359	960
Exported Lead in Scrap	885	1,015	457
Sub-Total	150,046	237,676	134,818
NET APPARENT CONSUMPTION	1,305,883	1,152,514	664,809
REPORTED CONSUMPTION	1,138,115	986,387	540,900
Unaccounted For (Stockpiles, etc.)	167,768	166,127	123,909
Production of Refined Primary Lead:			
From Domestic Ores & Base Bullion	347,675	269,082) 211,519
From Foreign Ores & Base Bullion	185,858	201,074	
ARIZONA MINE PRODUCTION	12,441	11,890	5,882
WORLD MINE PRODUCTION	2,610,000	2,520,000	N.A.
U.S.MINE PROD.AS % OF REPORTED CONSUMPTION	29.72%	27.11%	23.74%
AVG.PRICE OF LEAD-N.Y. (E. & M.J.)	14.658¢	12.109¢	11.788¢

QUARTERLY IMPORTS AND EXPORTS OF LEAD INTO AND FROM UNITED STATES
1958 AND FIRST HALF 1959

Source: A.B.M.S., U.S. Dept. of Commerce

Country of Origin	1958		1st	2nd	1st
	Total	Quarterly Avg.	Quarter 1959	Quarter 1959	Half 1959
Ore, Matte & Base Bullion (Lead Content)	202,088	50,522	47,436	26,065	73,501
Canada	22,267	5,567	9,899	6,291	16,190
Mexico	1,791	448	119	119	238
Greenland	5,276	1,319	14	-	14
Guatemala	5,019	1,255	-	-	-
Honduras	3,581	895	716	671	1,387
Peru	70,899	17,725	16,961	6,831	23,792
Bolivia	14,715	3,679	6,100	398	6,498
Union of So. Africa	49,215	12,303	5,611	7,975	13,586
Australia	25,849	6,462	7,754	3,642	11,396
Other Countries	3,476	869	262	138	400
Pigs and Bars	368,452	92,113	66,438	86,598	153,036
Canada	40,926	10,232	7,317	18,260	25,577
Mexico	122,864	30,716	19,969	30,176	50,145
Peru	42,473	10,618	5,968	10,197	16,165
Denmark	1,576	394	84	-	84
United Kingdom	8,836	2,209	265	298	563
Belgium-Luxembourg	5,872	1,468	280	-	280
W. Germany	3,118	780	2,727	-	2,727
Spain	14,237	3,559	6,222	952	7,174
Yugoslavia	36,789	9,197	8,653	8,298	16,951
Fr. Morocco	10,537	2,634	2,207	2,125	4,332
Australia	80,515	20,129	12,689	13,628	26,317
Sweden	-	-	-	2,535	2,535
Other Countries	709	177	57	129	186
Reclaimed, Scrap, etc.	6,570	1,642	3,156	1,868	5,024
TOTAL IMPORTS	577,110	144,278	117,030	114,531	231,561
EXPORTS:					
Ore, Matte & Base Bullion	1,012	253	60	152	212
Pigs & Bars	1,359	340	778	182	960
Scrap	1,015	254	180	277	457
TOTAL EXPORTS	3,386	847	1,018	611	1,629

SUMMARY OF LEAD IMPORTS AND EXPORTS

	1954	1955	1956	1957	1958
Total Lead Imports	443,243	462,208	479,875	531,441	577,110
Total Lead Exports	4,592	4,720	7,819	6,130	3,386
EXCESS LEAD IMPORTS	438,651	457,488	472,056	525,311	573,724

U. S. LEAD CONSUMPTION - YEARS 1957, 1958 & 1st HALF 1959

Source: U. S. B. M.

	1957	1958	First Half 1959
Metal Products:			
Ammunition -----	42,509	40,215	22,727
Bearing metals -----	26,997	18,980	11,465
Brass and bronze -----	24,491	20,379	12,523
Cable covering -----	108,225	74,981	33,494
Calking lead -----	65,634	70,807	39,590
Casting metals -----	12,672	8,674	3,882
Collapsible tubes -----	10,316	8,432	4,570
Foil -----	4,839	4,586	1,893
Pipes, traps and bends -----	24,739	23,044	11,568
Sheet lead -----	27,474	25,104	14,434
Solder -----	70,684	59,653	33,021
Storage battery grids, posts, etc. ---	185,617	159,795	85,908
Storage battery oxides -----	175,398	152,930	86,539
Terne metal -----	1,642	1,227	1,038
Type metal -----	28,726	26,740	13,609
Total -----	809,963	695,547	376,261
Pigments:			
White lead -----	15,701	13,589	6,799
Red lead and litharge -----	78,323	64,892	40,401
Pigment colors -----	12,449	11,853	6,836
Other 1/ -----	8,888	5,567	2,202
Total -----	115,361	95,901	56,238
Chemicals:			
Tetraethyl lead -----	177,001	159,412	79,645
Miscellaneous chemicals -----	3,556	3,233	1,555
Total -----	180,557	162,645	81,200
Miscellaneous Uses:			
Annealing -----	5,317	5,114	2,778
Galvanizing -----	1,354	1,226	680
Lead Plating -----	670	438	103
Weights and ballast -----	7,526	7,577	3,433
Total -----	14,867	14,355	6,994
Other uses, unclassified -----	17,367	17,939	8,230
Total Reported 2/ -----	1,138,115	986,387	528,923

1/ Includes lead content of leaded zinc oxide production.

2/ Includes lead content of scrap used directly in fabricated products.

Arizona Department of Mineral Resources

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