

Mineral Industry Surveys

For information, contact:

David E. Guberman, Lead Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4977, Fax: (703) 648-7757
E-mail: dguberman@usgs.gov

Elsie D. Isaac (Data)
Telephone: (703) 648-7966
Fax: (703) 648-7975
E-mail: eisaac@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

LEAD IN MAY 2013

Domestic mine production (recoverable) of lead in May was 28,900 metric tons (t). Average daily mine production in May was 932 t, 2% less than that in April. Year-to-date lead mine production was slightly less than that during the same period in 2012. Secondary refinery production of lead in May increased by 3% from that of the previous month, and year-to-date production was essentially unchanged from that of the same period in 2012.

Total imports of lead for consumption in May 2013 decreased by 18% from those in the previous month, but year-to-date imports were 81% greater than during the same period in 2012. The increase was partially attributed to lead consumers and traders accumulating lead stocks in anticipation of the planned closure at yearend of Doe Run Resources Corp.'s (St. Louis, MO) primary lead smelter-refinery in Herculaneum, MO. Total exports of lead, exclusive of scrap, in May were about 45% less than those in the previous month owing to decreased exports of lead contained in ore and concentrate. Exports of spent lead-acid batteries decreased by 6% in May compared with those in April, but year-to-date exports increased by about 10% compared with those in the same period of 2012.

The Platts Metals Week average North American producer price for lead in May 2013 was \$1.14 per pound, essentially unchanged from that of the previous month and from that in May 2012. The London Metal Exchange Ltd. (LME) cash price of lead in May 2013 averaged \$2,028 per metric ton, essentially unchanged from that of the previous month and slightly greater than that in May 2012. The Platts average U.S. used lead-acid batteries price in May 2013 was \$0.38 per pound, essentially unchanged from that in April. Global LME lead stocks at the end of May 2013 were 217,000 t, 15% less than those at the end of April.

At its April 2013 meeting in Lisbon, Portugal, the International Lead and Zinc Study Group (ILZSG) forecast global increases in lead consumption and production in 2013. ILZSG expected that global lead consumption in 2013 would increase by 5% from that in 2012 to 11.09 million metric tons (Mt), primarily owing to increased consumption in China for use in lead-acid batteries. Lead consumption in Europe in 2013

was expected to increase slightly from that of 2012. Global lead mine production in 2013 was forecast to increase by 4% from that in 2012 to 5.43 Mt, owing to increased mine production in Australia and China. Global refined lead production was forecast to increase by 5% in 2013 to 11.13 Mt. Although refined lead production increases in China were expected to account for the majority of the global growth, production increases were also forecast in Australia, Bolivia, Italy, Kazakhstan, the Republic of Korea, Mexico, and the United States. ILZSG forecast that global refined lead production would exceed consumption by about 42,000 t in 2013 (International Lead and Zinc Study Group, 2013).

Update

In mid-June, a Superior Court judge in California ruled that Exide Technologies, Inc. (Milton, GA) could resume operations at its Vernon, CA, secondary lead smelter (90,000 metric tons per year of lead capacity) pending a July 2 court hearing. The California Department of Toxic Substances Control (DTSC) had ordered Exide to suspend operations in May owing to environmental concerns. (See Lead in February 2013.) At the July 2 hearing, the judge issued a preliminary injunction permitting Exide to keep the plant open indefinitely. Exide planned to resume full operations and was implementing storm water and air quality control improvements at the plant (Exide Technologies, Inc. 2013a, b).

References Cited

- Exide Technologies, Inc., 2013a, Exide Technologies issues statement on Vernon facility: Vernon, CA, Exide Technologies, Inc. news release, June 19. (Accessed June 19, 2013, at <http://ir.exide.com/releasedetail.cfm?ReleaseID=772562>.)
- Exide Technologies, Inc., 2013b, Exide Technologies permitted to remain open in Vernon, California: Vernon, CA, Exide Technologies, Inc. news release, July 2. (Accessed July 2, 2013, at <http://ir.exide.com/releasedetail.cfm?ReleaseID=775106>.)
- International Lead and Zinc Study Group, 2013, ILZSG spring 2013 meetings—Forecasts: Lisbon, Portugal, International Lead and Zinc Study Group press release, April 25, 4 p. (Accessed April 25, 2013, at http://www.ilzsg.org/pages/document.aspx?page=4&ff_aa_document_type=R&from=2.)

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2012 ^p		2013		
	January– December	January– May	April	May	January– May
Production:					
Mine (recoverable)	336,000	139,000	28,600	28,900	136,000
Secondary refinery:					
Reported by smelters/refineries	1,170,000	484,000	95,100 ^r	98,100	487,000
Estimated	11,700	4,910	951 ^r	981	4,870
Recovered from copper-base scrap ^e	15,000	6,250	1,250	1,250	6,250
Total secondary	1,190,000	495,000	97,300 ^r	100,000	499,000
Consumption:					
Reported	1,470,000	624,000	114,000 ^r	114,000	585,000
Undistributed ^c	38,600	18,700	3,420 ^r	3,410	17,600
Total	1,510,000	643,000	117,000 ^r	117,000	603,000
Stocks, end of period, consumers and secondary smelters	57,500	51,800	94,300 ^r	98,000	98,000
Imports for consumption:					
Base bullion	1,020	270	58	--	1,350
Refined metal	349,000	135,000	45,000	37,000	244,000
Exports:					
Ore and concentrate	214,000	47,600	15,900	5,570	45,700
Bullion	72	72	207	--	301
Wrought and unwrought lead	53,300	21,000	4,080	5,500	20,700
TEL/TML preparations, based on lead compounds	1,730	631	223	170	821
Scrap (gross weight)	25,900	11,700	2,460	3,100	14,600
Platts Metals Week North American producer price (cents per pound)	121.70	114.07	114.35	114.35	114.95

^eEstimated. ^pPreliminary. ^rRevised. -- Zero.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American ¹	London Metal Exchange cash		Used lead-acid batteries ²
	¢/lb	¢/lb	\$/t	¢/lb
2012:				
May	113.81	90.65	1,998.51	NA
June	113.26	84.12	1,854.42	NA
July	113.34	85.09	1,875.97	NA
August	113.42	85.97	1,895.42	NA
September	114.63	98.38	2,168.91	NA
October	114.81	97.66	2,152.96	NA
November	114.91	98.84	2,179.08	38.75
December	115.26	103.18	2,274.83	37.25
January–December	121.70	108.92	2,401.20	NA
2013:				
January	115.51	106.13	2,339.84	38.40
February	115.63	107.76	2,375.80	39.75
March	114.92	99.02	2,183.06	39.25
April	114.35	92.07	2,029.80	38.40
May	114.35	91.98	2,027.86	38.25
January–May	114.95	99.39	2,191.27	38.81

NA Not available.

¹Platts Metals Week North American Producer price.

²Platts Metals Week assessment for used lead-acid automotive batteries (50% lead) picked up in U.S. Midwest, suitable for delivery to secondary smelters within 30 days.

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	April 30, 2013 ^f	receipts		May 31, 2013
Battery-lead	39,200	91,400	90,000	40,600
Other ²	4,350	2,490	2,770	4,080
Total	43,600	93,900	92,800	44,600
Percent change from preceding month ³	XX	-1.2	+0.0	+2.4

^fRevised. XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes soft lead, solder, drosses and residues, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

³Based on unrounded data; preceding monthly data may have been revised.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN MAY 2013¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	66,300	--	--
Remelt lead	W	--	--
Antimonial lead	30,900	W	W
Other ²	901	161	354
Total lead-base	98,100	161	354

W Withheld to avoid disclosing company proprietary data; included in "Other."

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES¹

(Metric tons, lead content)

Use	2012 ^p		2013		
	January– December	January– May	April	May	January– May
Metal products:					
Ammunition, shot and bullets	69,100	29,100	6,870	6,550	33,600
Brass and bronze, billet and ingots	3,400	1,420	311	311	1,460
Cable covering, power and communication and caulking lead, building construction	3,800	2,190	195	195	975
Casting metals	11,600	5,370	920	924	4,720
Sheet lead, pipes, traps and other extruded products	27,600	10,500	1,400	1,460	7,130
Solder	6,370	2,660	542 ^r	542	2,720
Storage batteries, including oxides	1,300,000	554,000	100,000 ^r	100,000	517,000
Terne metal, type metal, and other metal products ²	14,800	6,470	1,230	1,230	5,940
Total metal products	1,440,000	612,000	112,000	111,000	573,000
Other oxides and miscellaneous	31,700	12,100	2,340	2,410	11,700
Total reported	1,470,000	624,000	114,000 ^r	114,000	585,000
Undistributed ^c	38,600	18,700	3,420 ^r	3,410	17,600
Grand total	1,510,000	643,000	117,000 ^r	117,000	603,000

^cEstimated. ^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes lead consumed in bearing metals, foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

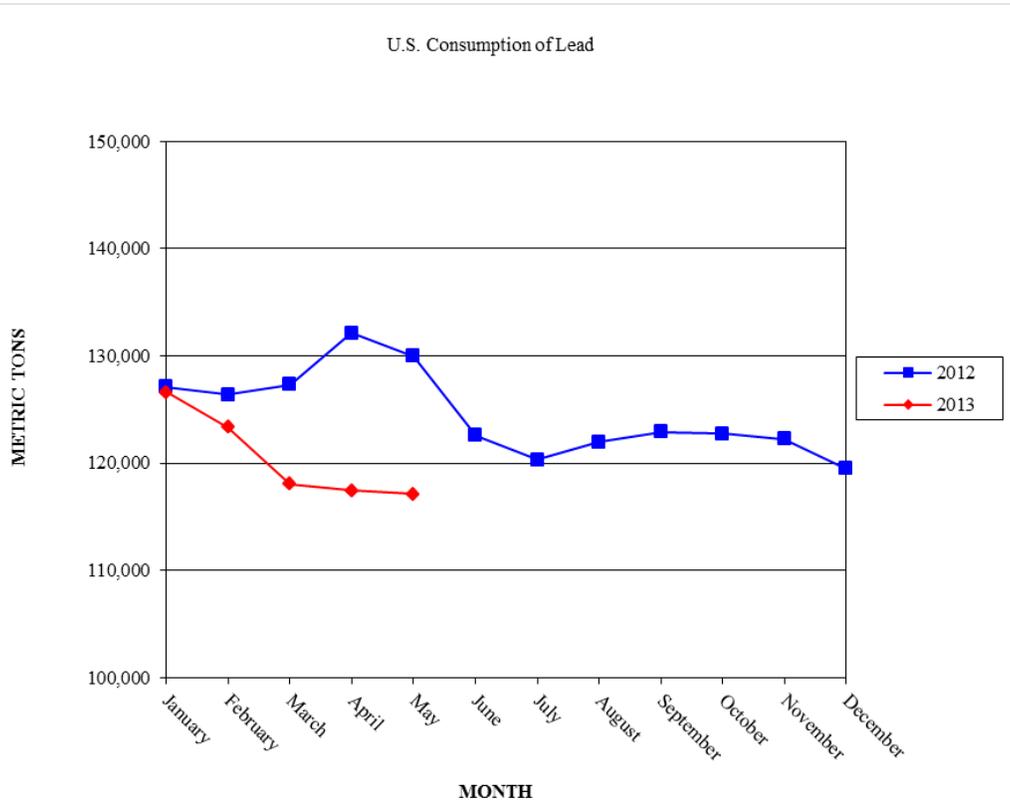


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Net receipts	Consumption	Stocks May 31, 2013
	April 30, 2013 ^f				
Soft lead	73,900		75,600	72,000	77,500
Antimonial lead	18,600		26,100	26,000	18,800
Other ²	1,800		15,700	15,700	1,710
Total	94,300		117,000	114,000	98,000

^fRevised.

¹Data are rounded to no more than three significant digits.

²Includes copper-based scrap, and lead alloys.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons unless otherwise specified)

	2012		2013		
	January– December	January– May	April	May	January– May
Lead content:					
Ore and concentrates	214,000	47,600	15,900	5,570	45,700
Bullion	72	72	207	--	301
Wrought and unwrought lead	53,300	21,000	4,080	5,500	20,700
TEL/TML preparations, based on lead compounds	1,730	631	223	170	821
Total	269,000	69,300	20,400	11,200	67,500
Gross weight, scrap	25,900	11,700	2,460	3,100	14,600
Spent lead-acid batteries, used for starting engines (units)	22,700,000	9,640,000	2,530,000	2,380,000	10,700,000
-- Zero.					

¹Data are rounded to more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION BY TYPE OF MATERIALS AND BY
COUNTRY OF ORIGIN¹

(Metric tons, lead content)

Material and country of origin	2012		2013		
	January– December	January– May	April	May	January– May
Ore, matte, etc; Canada	1,530	--	--	--	--
Base bullion:					
Mexico	695	270	--	--	148
Venezuela	327	--	58	--	1,200
Total	1,020	270	58	--	1,350
Pigs and bars:					
Australia	24,300	--	--	--	46,600
Canada	240,000	103,000	31,500	21,300	113,000
China	5,000	5,000	--	--	--
Mexico	56,100	22,800	9,090	14,400	49,700
Other	23,200	4,490	4,400	1,370	34,300
Total	349,000	135,000	45,000	37,000	244,000
Grand total	352,000	135,000	45,000	37,000	245,000
-- Zero.					

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.