

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) 648-7950
Fax: (703) 648-7975
E-mail: eisaac@usgs.gov

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

LEAD IN APRIL 2012

Domestic mine production (recoverable) of lead in April was estimated to be 27,500 metric tons (t). Average daily mine production in April was 917 t, 3% higher than that in March. Secondary refinery production of lead in April increased slightly from that of the previous month. Year-to-date production of secondary refined lead was slightly greater than that in the corresponding period of 2011.

Total imports of lead for consumption in April were 11% greater than those in the previous month and 9% greater than those in the same period in the previous year. Canada (74%) and Mexico (18%) were the principal sources of imported refined lead for the first 4 months of the year. Total exports of lead, exclusive of scrap, in April were 60% less than those in the previous month, owing primarily to a decline in exports of lead contained in ore and concentrates. China and Canada were the leading destinations for ore and concentrates exports through April. Total exports of lead, exclusive of scrap, for the year through April were slightly more than those in the same period in the previous year.

The average Platts Metals Week North American producer price for lead in April 2012 was \$1.14 per pound, essentially unchanged from that of the previous month and 7% lower than that in April 2011. The London Metal Exchange (LME) cash price of lead in April 2012 averaged \$2,063 per metric ton, up slightly from that of the previous month but 25% lower than that in April 2011. Global LME lead stocks at the end of April 2012 were 359,500 t, 5% lower than those at the end of March 2012 but 16% greater than those at month-end April 2011.

In mid-April, Johnson Controls Inc. (JCI) (Milwaukee, WI), a leading producer of lead-acid batteries for automobiles, announced that construction and hiring at its new secondary lead smelter (130,000 metric ton per year refined lead capacity) in Florence, SC, was on schedule, and the facility was expected to open by the end of the summer. The plant would be the first new secondary lead smelter opened in the United States in about 20 years and primarily would serve customers in the mid-Atlantic

region. All of the major equipment necessary for recycling spent lead-acid batteries had arrived at the plant, and staffing the facility was ongoing. JCI planned to apply for Leadership in Energy and Environmental Design certification at the facility, inclusive of geothermal heating and cooling, green roofs, natural lighting, and water recycling systems. When operations commence, Florence will be JCI's third secondary lead smelter in North America with the other two in Mexico (Johnson Controls, Inc., 2012).

Based on information presented at its meeting in April, the International Lead and Zinc Study Group (ILZSG) forecast that global lead mine production in 2012 would be 4.88 million metric tons (Mt), about 5% greater than that of the previous year owing primarily to increased mine output in China. Global refined lead production was forecast to be 10.9 Mt in 2012, more than 4% greater than that in 2011. Much of this increase was attributed to increased refined lead production in several countries in Asia, Europe, and North America. Global demand for refined lead in 2012 was forecast to rise by 5% from that of 2011, to 10.78 Mt, owing to increased lead use in China, India, Japan, the Republic of Korea, Poland, Russia, Thailand, and Vietnam. ILZSG predicted that the global supply of refined lead would exceed demand during the remainder of 2012, creating a lead surplus of 114,000 t by yearend (International Lead and Zinc Study Group, 2012).

References Cited

- International Lead and Zinc Study Group, 2012, ILZSG spring 2012 meetings—Forecasts: Lisbon, Portugal, International Lead and Zinc Study Group press release, April 26, 4 p. (Accessed April 16, 2012, at http://www.ilzsg.org/pages/488/document.aspx?page=3&ff_aa_document_type=R&from=2.)
- Johnson Controls, Inc., 2012, Johnson Controls reaches major construction and hiring milestone at state-of-the-art Florence recycling center: Milwaukee, WI, Johnson Controls, Inc. news release, April 19. (Accessed April 19, 2012, via <http://www.johnsoncontrols.com/content/us/en/news.html>.)

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2011		2012		
	January– December ^p	January– April	March	April	January– April
Production:					
Mine (recoverable)	336,000	114,000	27,600 ^r	27,500	111,000
Secondary refinery:					
Reported by smelters/refineries	1,170,000	383,000	95,600 ^r	95,800	387,000
Estimated	11,700	3,830	956 ^r	958	3,870
Recovered from copper-base scrap ^e	15,000	5,000	1,250	1,250	5,000
Total secondary	1,190,000	392,000	97,800 ^r	98,000	396,000
Consumption:					
Reported	1,530,000	460,000	135,000 ^r	134,000	515,000
Undistributed ^e	45,800	13,800	4,060 ^r	4,030	15,400
Total	1,570,000	474,000	140,000 ^r	138,000	530,000
Stocks, end of period, consumers and secondary smelters	54,800	55,300	54,800 ^r	54,900	54,900
Imports for consumption:					
Base bullion	434	132	--	168	270
Refined metal	313,000	100,000	23,700	26,100	109,000
Exports:					
Ore and concentrate	223,000	36,200	15,100	3,040	35,600
Bullion	70	8	21	--	72
Wrought and unwrought lead	47,200	14,900	4,190	4,610	16,100
TEL/TML preparations, based on lead compounds	6,270	664	106	106	502
Scrap (gross weight)	31,100	7,710	1,810	2,390	8,840
Platts Metals Week North American producer price (cents per pound)	121.70	121.59	114.03	114.03	114.13

^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 producer price ¢/lb	London Metal Exchange cash		Sterling exchange rate \$/£
		\$/metric ton	£/metric ton	
2011:				
April	122.50	2,740.61	1,675.09	1.636088
May	124.83	2,419.54	1,482.37	1.632210
June	125.17	2,511.64	1,548.78	1.621686
July	128.94	2,682.04	1,879.73	1.426819
August	127.90	2,404.09	1,468.11	1.637541
September	125.74	2,297.90	1,668.27	1.377414
October	113.86	1,948.25	1,237.07	1.574886
November	113.73	1,981.59	1,252.77	1.581773
December	113.87	2,018.59	1,292.71	1.561520
January–December	121.70	2,401.20	1,548.94	1.550217
2012:				
January	114.17	2,093.74	1,349.68	1.551290
February	114.29	2,125.79	1,345.68 ^r	1.579710
March	114.03	2,061.01	1,302.73	1.582068
April	114.03	2,062.67	1,287.68	1.601844
January–April	114.13	2,085.80	1,321.44	1.578728

^rRevised.

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net receipts	Consumption	Stocks
	March 31, 2012			April 30, 2012
Battery-lead	33,000 ^r	87,800	87,400	33,400
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	3,910 ^r	2,510	2,170	4,250
Total	36,900 ^r	90,300	89,600	37,700
Percent change from preceding month ³	XX	-4.3	-6.2	+2.0

^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

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

²Includes solder, 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 APRIL 2012¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	80,700	--	--
Remelt lead	W	--	--
Antimonial lead	9,960	(2)	(2)
Other ³	5,080	(2)	(2)
Total lead-base	95,800	150	283

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.

²Withheld to avoid disclosing company proprietary data; included in "Total."

³Includes 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	2011		2012		
	January– December	January– April	March	April	January– April
Metal products:					
Ammunition, shot and bullets	69,300	25,200	6,520	5,500	23,600
Brass and bronze, billet and ingots	1,660	1,120	283	283	1,130
Cable covering, power and communication and caulking lead, building construction	8,410	2,980	231	231	1,950
Casting metals	14,600	4,860	1,190	1,190	4,820
Sheet lead, pipes, traps and other extruded products	26,800	9,060	2,080	2,140	8,330
Solder	6,400	2,680	531	531	2,130
Storage batteries, including oxides	1,360,000	402,000	121,000 ^r	121,000	458,000
Terne metal, type metal, and other metal products ²	16,400	5,050	1,230	1,230	4,900
Total metal products	1,500,000	452,000	133,000 ^r	132,000	505,000
Other oxides and miscellaneous	26,500	7,460	2,600 ^r	2,490	9,550
Total reported	1,530,000	460,000	135,000 ^r	134,000	515,000
Undistributed ^c	45,800	13,800	4,060 ^r	4,030	15,400
Grand total	1,570,000	474,000	140,000 ^r	138,000	530,000

^cEstimated. ^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.

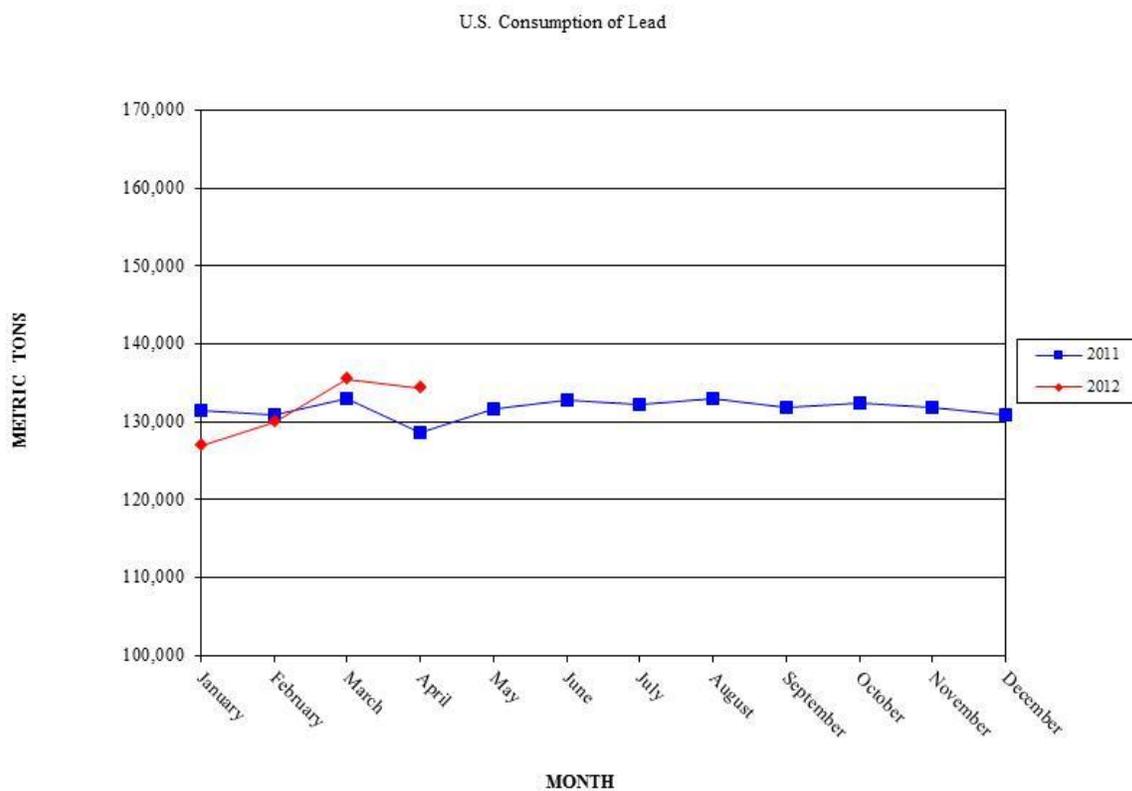


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	March 31, 2012	Net receipts		April 30, 2012
Soft lead	34,200 ^r	74,100	74,500	33,800
Antimonial lead	18,600 ^r	34,100	33,600	19,100
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	54,800 ^r	134,000	134,000	54,900

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

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

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

(Metric tons unless otherwise specified)

	2011		2012		January– April
	January– December	January– April	March	April	
Lead content:					
Ore and concentrates	223,000	36,200	15,100	3,040	35,600
Bullion	70	8	21	--	72
Wrought and unwrought lead	47,200	14,900	4,190	4,610	16,100
TEL/TML preparations, based on lead compounds	6,270	664	106	106	502
Total	277,000	51,800	19,400	7,750	52,300
Gross weight, scrap	31,100	7,710	1,810	2,390	8,840
Spent lead-acid batteries, used for starting engines (units)	25,400,000	6,940,000	1,790,000	1,520,000	7,810,000
-- 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	2011		2012		
	January– December	January– April	March	April	January– April
Ore, matte, etc.	--	--	--	--	--
Base bullion:					
Canada	35	18	--	--	--
Mexico	199	114	--	168	270
Venezuela	200	--	--	--	--
Total	434	132	--	168	270
Pigs and bars:					
Canada	250,000	81,900	18,200	20,700	81,100
China	32	--	--	--	5,000
Mexico	56,000	17,800	5,320	4,930	19,300
Other	7,560	566	255	475	3,640
Total	313,000	100,000	23,700	26,100	109,000
Grand total	314,000	100,000	23,700	26,200	109,000

-- Zero.

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

Source: U.S. Census Bureau.