

Mineral Industry Surveys

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LEAD IN APRIL 2007

Domestic mine production of lead, based on the net quantity of lead recovered from concentrate, was 31,600 metric tons (t) in April, according to the U.S. Geological Survey. This was a decline of 14% compared with production in March 2007. Secondary refinery production (97,400 t) decreased by 1% from that of the previous month, and reported consumption also decreased 1% from that in March 2007.

According to Platts Metals Week published quotations, the average North American producer price increased slightly from that of the previous month to 98.5 cents per pound. The London Metal Exchange Ltd. (LME) cash price in April averaged \$2,000 per metric ton, an increase of 4.5% from the March 2007 average price. During April, global LME lead stocks increased by 8,450 t to 41,575 t at month's end.

Three battery manufacturers, EnerSys Inc. (Reading, PA), Exide Technologies (Alpharetta, GA), and Johnson Controls Inc. (Milwaukee, WI) introduced new brand lines. EnerSys Inc. launched its new thin-plate pure lead (TPPL) valve regulated lead acid (VRLA) battery that reportedly has 10% greater power density and three times the shelf life of conventional VRLA batteries. TPPL VRLA batteries reportedly were more resistant to corrosion than lead-calcium batteries and show potential in wired and wireless telecommunication and cable television applications. Exide Technologies introduced in March its Element brand of valve-regulated motive power recyclable batteries, which do not require watering and high frequency chargers for industrial applications. Johnson Controls Inc. planned to introduce a full line of batteries for various kinds of vehicles (CRU Lead Monitor, 2007c).

In Australia, Iverina Inc. (Toronto, Ontario, Canada) placed its Magellan lead mine on temporary care and maintenance pending declaring force majeure on lead sales contracts. The company sought approvals to ship its lead concentrate under alternate arrangements involving the use of enclosed and double-sealed containers, which would be transported from the mine site, through a port, and then to customers in Asia (CRU Lead Monitor, 2007d).

In China, total exports of refined lead in the first 2 months of 2007 decreased by 84% to 17,600 t compared with those of the same period in 2006. Lead-acid battery exports also fell, but by

only 8% to 21.4 million units of starting-lighting-ignition (SLI) and industrial batteries combined (CRU Lead Monitor, 2007a).

In India, the Indian Government planned to change its import policy in hopes of reducing the amount of pollution emitted from illegal small-scale secondary lead smelters. Under new guidelines, only original equipment manufacturers and government-approved secondary recyclers would be able to obtain lead-acid batteries. Also, Energy Leader Batteries India Ltd. (Hyderabad, India) planned the construction of a new VRLA battery manufacturing plant in the Krishna district of Andhra Pradesh, estimated to be operational by November 2007 (CRU Lead Monitor, 2007b).

A bulletin detailing new standards on production sales, energy consumption, and resource utilization of the Chinese lead and zinc industry was published. The bulletin aimed to consolidate the mining environment and was released in mid-March by the National Development and Reform Commission, a macroeconomic management agency under the Chinese State Council. According to the bulletin, new lead smelting projects must have a capacity of at least 50,000 metric tons per year (t/yr) while new lead and zinc mines must meet a minimum capacity of 30,000 t/yr with a mine life of at least 15 years. Current secondary lead producing smelters are to adhere to a minimum production capacity of 10,000 t/yr (CRU Lead Monitor, 2007e).

The National Defense Stockpile aggregated cash disposal (sale) of lead in April, under the Basic Ordering Agreement DLA-Lead-005, was sold out (Defense National Stockpile Center, 2007).

References Cited

- CRU Lead Monitor, 2007a, Cancellation of China's VAT rebate begins to be felt across Asia: CRU Lead Monitor, April, p. 4.
- CRU Lead Monitor, 2007b, India to restrict battery imports, plans manufacturing plant: CRU Lead Monitor, April, p. 10.
- CRU Lead Monitor, 2007c, Leading battery manufacturers introduce new brand lines: CRU Lead Monitor, April, p. 10.
- CRU Lead Monitor, 2007d, Mine news: CRU Lead Monitor, April, p. 7.
- CRU Lead Monitor, 2007e, Other China news: CRU Lead Monitor, April, p. 8.
- Defense National Stockpile Center, 2007, Stockpile announces BOA sales for February 2007: Fort Belvoir, VA, Defense National Stockpile Center news release, March 5, 1 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2006		2007		
	Year	January- April	March	April	January- April
Production:					
Mine (recoverable)	426,000	142,000	36,700 [†]	31,600	141,000
Primary refinery	143,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,140,000	380,000 [†]	96,400	95,200	383,000
Estimated	11,200	3,840 [†]	973	961	3,870
Recovered from copper-base scrap [‡]	15,000	5,000 [†]	1,250	1,250	5,000
Total secondary	1,170,000	389,000 [†]	98,600	97,400	392,000
Stocks, end of period:					
Secondary smelters and consumers	64,700	50,600 [†]	49,000	48,500	48,500
Imports for consumption:					
Ore and concentrate	539	--	236	NA	494 ²
Refined metal	331,000	87,900	21,000	NA	58,900 ²
Consumption:					
Reported	1,470,000	489,000 [†]	125,000	124,000	498,000
Undistributed [‡]	45,600	15,100 [†]	3,900 [†]	3,830	15,400
Total	1,520,000	505,000 [†]	129,000	128,000	514,000
Exports:					
Ore and concentrate	298,000	41,700	26,100	NA	7,340 ²
Bullion	197	105	--	NA	34 ²
Wrought and unwrought lead	68,500	26,500	4,900	NA	6,810 ²
TEL/TML preparations, based on lead compounds	9,520	1,010	60	NA	2,210 ²
Exports (gross weight): Scrap	121,000	27,200	7,950	NA	15,300 ²
Platts Metals Week North American producer price (cents per pound)	77.40	69.98	93.82	98.53	91.54

[‡]Estimated. [†]Revised. NA Not available. -- Zero.

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

²Includes data for January-March only; April 2007 data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2006:				
April	76.46	1,169.88	661.68	1.768045
December	86.31	1,724.38	878.51	1.962855
Year	77.40	1,289.06	651.84	1.977591
2007:				
January	86.71	1,665.34	838.03	1.958719
February	87.11	1,778.56	907.92	1.958947
March	93.82	1,913.11	982.38	1.947427
April	98.53	1,999.78	1,005.98	1.987886

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks		Consumption	Stocks
	March 31, 2007	Net receipts		April 30, 2007
Battery-lead	30,400	107,000	105,000	32,200
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	1,920	9,070	9,190	1,800
Total	32,300	116,000	114,000	34,000
Percent change from preceding month	XX	-2.7	-3.9	+5.3

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 not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN APRIL 2007¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	72,800	--	--
Remelt lead	W	--	--
Antimonial lead	22,100	(2)	(2)
Other ³	377	(2)	(2)
Total lead-base	95,200	138	286

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	2006		2007		
	January-December ^p	January-April	March	April	January-April
Metal products:					
Ammunition, shot and bullets	74,300	25,700	7,410	6,210	27,200
Brass and bronze, billet and ingots	3,110	1,180 ^r	389	381	1,110
Cable covering, power and communication and calking lead, building construction	7,940	2,780 ^r	674	626	3,270
Casting metals	19,500	6,500 ^r	1,620	1,620	6,500
Sheet lead, pipes, traps and other extruded products	30,100	10,100 ^r	5,540	2,590	13,300
Solder	8,060	2,800 ^r	650	650	2,600
Storage batteries, including oxides	1,280,000	425,000 ^r	105,000	108,000	428,000
Terne metal, type metal, and other metal products ²	1,810	619 ^r	145	145	586
Total metal products	1,430,000	474,000 ^r	121,000	120,000	483,000
Other oxides and miscellaneous	45,300	15,100 ^r	3,780	3,790	15,100
Total reported	1,470,000	489,000 ^r	125,000	124,000	498,000
Undistributed ^c	45,600	15,100 ^r	3,900 ^r	3,830	15,400
Grand total	1,520,000	505,000 ^r	129,000 ^r	128,000	514,000

^cEstimated. ^pPreliminary. ^rRevised.

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

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

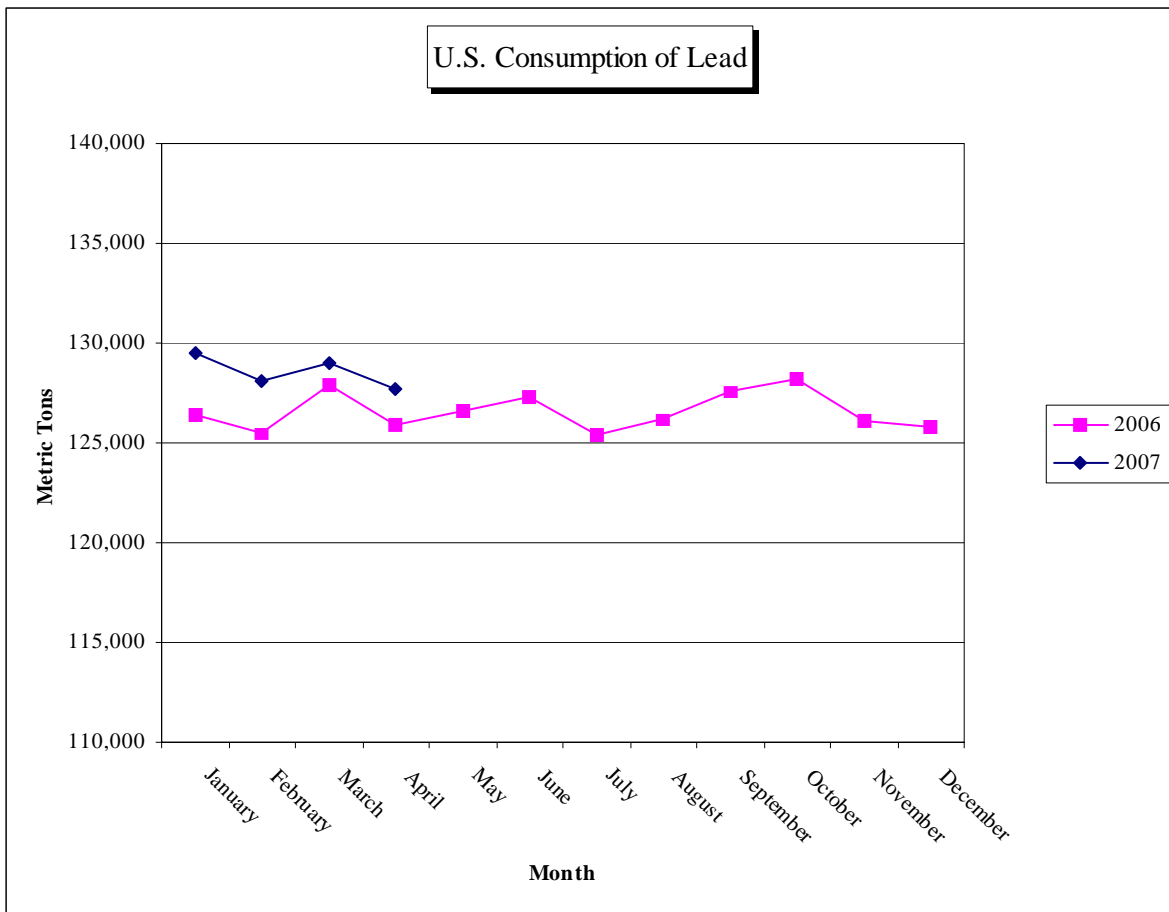


TABLE 6
 CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF
 LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	March 31, 2007	Net receipts		April 30, 2007
Soft lead	22,500	69,400	69,800	22,000
Antimonial lead	9,790	26,700	26,800	9,740
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	49,000	123,000	124,000	48,500

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)

	2006		2007		January- March
	March	Year	February	March	
Lead content:					
Ore and concentrates	6,570	298,000	2,130	26,100	7,340
Bullion	29	197	22	--	34
Materials excluding scrap	8,630	68,500	4,120	4,900	6,810
TEL/TML preparations, based on lead compounds	909	9,520	1,750	60	2,210
Total	16,100	376,000	8,010	31,000	16,400
Gross weight: Scrap	6,070	121,000	6,720	7,950	15,300

-- Zero.

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

Source: U.S. Census Bureau.

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

(Metric tons, lead content)

Country of origin	General imports					Imports for consumption				
	2006		2007			2006		2007		
	Year	January- March	February	March	January- March	Year	January- March	February	March	January- March
Base bullion:										
Canada	449	--	--	--	--	449	--	--	--	--
Other	90	--	127	236	494	90	--	127	236	494
Total	539	--	127	236	494	539	--	127	236	494
Pigs and bars:										
Australia	9,230	478	--	--	--	9,230	478	--	--	--
Canada	222,000	64,300	14,800	17,500	48,800	222,000	64,300	14,800	17,500	48,800
Mexico	15,800	2,800	1,190	2,370	4,860	15,800	2,800	1,190	2,370	4,860
Peru	34,600	9,410	1,820	1,140	5,080	34,600	9,410	1,820	1,140	5,080
Other	49,800	10,900	9	19	158	49,800	10,900	9	19	158
Total	331,000	87,900	17,800	21,000	58,900	331,000	87,900	17,800	21,000	58,900
Grand total	332,000	87,900	18,000	21,300	59,400	332,000	87,900	18,000	21,300	59,400

-- Zero.

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

Source: U.S. Census Bureau.