

Mineral Industry Surveys

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LEAD IN NOVEMBER 2004

Domestic mine production, based on the net quantity of lead recovered from concentrate, was 35,700 metric tons (t) in November, according to the U.S. Geological Survey. This was a decrease of a little over 1% percent compared with that of October. Mine production for the first 11 months of 2004 was 393,000 t, down by 6% compared with that of the same period in 2003. Secondary refinery production (94,900 t) decreased by 2% in November, and reported consumption (113,000 t) was down about 1% from that of the previous month. Secondary production for the first 11 months of 2004 was nearly the same compared with production in the first 11 months of 2003, and reported consumption rose by about 1% for the same period.

According to the Platts Metals Week published quotations, the average North American producer price increased to 60.70 cents per pound in November, a less than 0.2% increase above the October price. The average London Metal Exchange Ltd. (LME) cash price increased to \$967.26 per metric ton, a 4% increase compared with the October price. These are significantly higher prices compared with November 2003 averages, up about 39% and 56%, respectively. The LME November prices ranged from a low of \$896.00 per metric ton (November 1) to a high of \$1,005 per metric ton (November 23); in November, the lead prices were below \$900 for only 1 trading day, while for 21 days the price was above \$900.00. For the month of November, LME lead stocks dropped by 6,300 t to 42,900 t.

In the United States, the supply of lead was still limited during the month of November. In Europe, some producers were seeing evidence of the expected seasonal slowing, while European LME stocks were continuing to be drawn down (into early December) (CRU International Ltd., 2004a). In China, the market remained strong supporting a high narrow price range; prices in November went from a low of \$1,148 per ton to a high of \$1,172 per ton. The Chinese lead-acid battery manufacturers on the other hand consider \$967 per ton a more acceptable price (CRU International Ltd., 2004a; Antaike, 2004).

CRU reported in early December that negotiations for lead deliveries for 2005 between suppliers and consumers in the

United States were almost completed. Domestic premiums were reported to be 6 to 7 cents per pound (an increase of 1.25 to 1.50 cents from 2003 prices). European negotiations for 2005 deliveries were still in progress in early December. Premium increases were anticipated to average around EUR 10 per metric ton (5.8 cents per pound) (CRU International Ltd., 2004a).

Chinese production of lead metal for the first 10 months of 2004 was 1.43 million metric tons, up 9.4% year-on-year. This rise in production was attributed to a combination of sharply increasing lead concentrates imports and increased domestic demand. Closure of smelters in the Western World, expanding smelter capacity in China, and competitive treatment charges resulted in a 27% increase in the January through October imports of lead concentrates (over 663,000 t). The automotive and battery sectors were continuing to support increased demand in China (Antaike, 2004).

Ivernia, Inc. of Toronto, Ontario, announced it had agreed to supply up to 100,000 t of lead concentrates during 2005 and 2006 to Metal Reclamation Industries' secondary lead smelter in Malaysia. These concentrates will be supplied from Ivernia's Magellan lead mine in Western Australia, which is on schedule to start producing in January of 2005. It is fairly unusual for primary lead concentrates to be going to a secondary smelter, but in this case the lead minerals are oxides, and the resulting concentrates will be compatible with secondary smelter metallurgy (CRU International Ltd., 2004b).

The National Defense Stockpile aggregated cash disposal (sale) of lead in November, under the monthly Basic Ordering Agreement DLA-Lead-005, was 3,640 t (4,012 short tons) for an approximate value of \$3.6 million (Defense National Stockpile Center, 2004).

References Cited

- Antaike, 2004, Industrial News—Recycling of waste lead-acid batteries urgently required: Antaike, China Metal Market – Lead & Zinc, Tin Monthly, no. 96, November, p. 9-10.
CRU International Ltd., 2004a, CRU Monitor—Lead: CRU International Ltd., December, 12 p.

CRU International Ltd., 2004b, CRU Monitor—Lead & Zinc Concentrates:
CRU International Ltd., December, 12 p.

Defense National Stockpile Center, 2004, Stockpile announces lead sales for
November 2004: Fort Belvoir, VA, Defense National Stockpile Center
news release, December 7, 1 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2003		2004		
	Year	January - November	October	November	January - November
Production:					
Mine (recoverable)	449,000	419,000	36,200	35,700	393,000
Primary refinery	245,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,140,000	1,030,000 ^r	94,600	92,700	1,020,000
Estimated	--	10,400 ^r	955	936	10,300
Recovered from copper-base scrap ^c	11,400	13,800	1,250	1,250	13,800
Total secondary	1,150,000	1,050,000 ^r	96,800	94,900	1,050,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	107,000	86,300 ^r	67,200	65,600	65,600
Imports for consumption:					
Ore and concentrate	6	6	--	NA	3 ²
Refined metal	175,000	150,000	17,100	NA	157,000 ²
Consumption:					
Reported	1,390,000	1,220,000 ^r	114,000 ^r	113,000	1,250,000
Undistributed ^c	--	121,000 ^r	3,520 ^r	3,500	38,800
Total	1,390,000	1,350,000 ^r	117,000 ^r	117,000	1,290,000
Exports:					
Ore and concentrate	253,000	237,000	58,600	NA	266,000 ²
Bullion	593	585	40	NA	109 ²
Wrought and unwrought lead	123,000	86,900	5,650	NA	70,400 ²
TEL/TML preparations, based on lead compounds	517	483	20	NA	603 ²
Exports (gross weight): Scrap	92,800	81,600	4,700	NA	46,000 ²
Platts Metals Week North American producer price (cents per pound)	43.76	43.71	60.60	60.70	54.63

^cEstimated. ^rRevised. 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 - October only; November 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	
2003:				
November	44.08	621.71	367.93	1.689739
December	44.30	691.69	394.89	1.751605
Year	43.76	514.62	313.88	1.634750
2004:				
September	58.98	934.92	521.23	1.793671
October	60.60	931.91	515.39	1.808175
November	60.70	967.26	519.84	1.86068

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks		Consumption	Stocks
	October 31, 2004	Net receipts		November 30, 2004
Battery-lead	12,000	96,700	96,600	12,100
Soft lead	W	W	W	W
Drosses and residues	1,870	1,430	1,480	1,820
Other ²	1,240	1,740	1,740	1,230
Total	15,100	99,900	99,800	15,200
Percent change from preceding month	XX	-0.1	-0.3	+0.4

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 NOVEMBER 2004¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	68,700	--	--
Remelt lead	W	W	W
Antimonial lead	23,500	W	W
Other ²	W	W	--
Total lead-base	92,700	37	326

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

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

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	2003		2004		
	Year	January - November ^f	October	November	January - November
Metal products:					
Ammunition, shot and bullets	48,800	48,600	4,220	3,850	48,100
Brass and bronze, billet and ingots	2,810	3,110	194	194	1,960
Cable covering, power and communication and calking lead, building construction	4,790	4,650	113	317	3,850
Casting metals	31,700	30,500	2,790	2,780	30,600
Sheet lead, pipes, traps and other extruded products	25,900	21,800	2,220	1,990	21,900
Solder	6,310	1,440	109	112	1,390
Storage batteries, including oxides	1,170,000	1,040,000	97,100	97,100	1,070,000
Terne metal, type metal, and other metal products ²	23,200	14,000	1,260	1,260	14,200
Total metal products	1,310,000	1,160,000	108,000	108,000	1,190,000
Other oxides and miscellaneous	78,300	79,200	5,670	5,640	61,700
Total reported	1,390,000	1,240,000	114,000	113,000	1,250,000
Undistributed ^e	--	38,300	3,520	3,500	38,800
Grand total	1,390,000	1,280,000	117,000	117,000	1,290,000

^eEstimated. ^fRevised. -- Zero.

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.

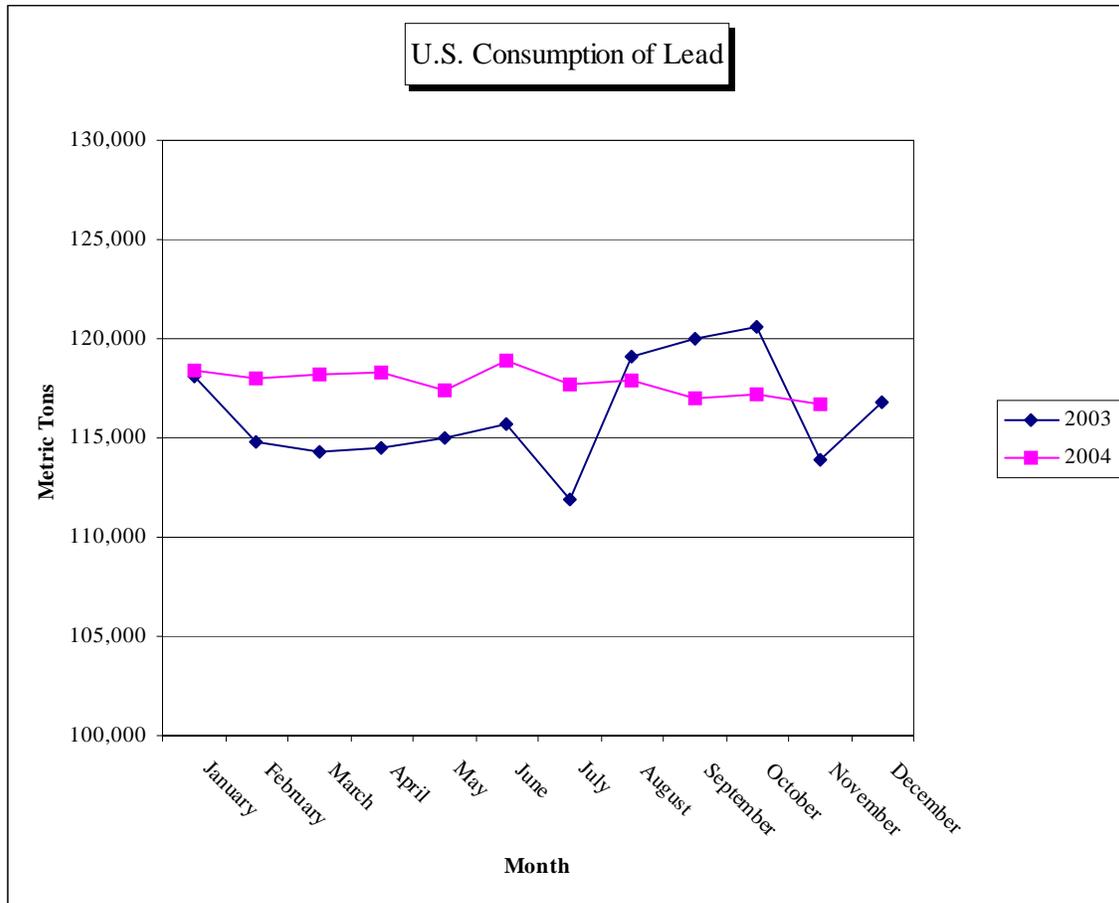


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS,
RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	October 31, 2004	Net receipts		November 30, 2004
Soft lead	35,700	65,100	65,700	35,100
Antimonial lead	15,500	28,000	28,600	14,900
Lead alloys	W	18,800	18,800	W
Copper-base scrap	W	38	34	W
Total	66,800	112,000	113,000	65,600

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

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

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

(Metric tons)

	2004				
	2003		2004		
	Year	October	September	October	January - October
Lead content:					
Ore and concentrates	253,000	44,800	25,300	58,600	266,000
Bullion	593	--	5	40	109
Materials excluding scrap	123,000	5,480	6,120	5,650	70,400
TEL/TML preparations, based on lead compounds	517	21	18	20	603
Total	377,000	50,300	31,500	64,300	337,000
Gross weight: Scrap	92,800	9,140	3,850	4,700	46,000

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 MATERIAL AND BY COUNTRY OF ORIGIN¹

(Metric tons, lead content)

Type and country	General imports					Imports for consumption				
	2003		2004			2003		2004		
	Year	January - October	September	October	January - October	Year	January - October	September	October	January - October
Base bullion:										
Argentina	5	--	--	--	--	5	--	--	--	--
Germany	1	--	--	--	--	1	--	--	--	--
Mexico	--	3 ^r	--	--	3	--	3 ^r	--	--	3
Total	6	3 ^r	--	--	3	6	3 ^r	--	--	3
Pigs and bars:										
Australia	10,100	10,100	--	--	--	107	--	1,010	800	13,000
Canada	167,000	142,000	12,000	15,700	130,000	167,000	142,000	12,000	15,700	130,000
China	1	1	--	--	2	1	1	--	--	2
Germany	--	--	--	--	281	--	--	--	--	281
Mexico	8,270	7,420	281	225	8,230	8,270	7,420	281	225	8,230
Other	259	127	1,300	334	5,730	259	127	1,300	341	5,870
Total	186,000	160,000	13,600	16,300	144,000	175,000	150,000	14,600	17,100	157,000
Grand total	186,000	160,000	13,600	16,300	144,000	175,000	150,000	14,600	17,100	157,000

^rRevised. -- Zero.

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

Source: U.S. Census Bureau.