

Mineral Industry Surveys

For information, contact:

Gerald R. Smith, Lead Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4983, Fax: (703) 648-7757
E-mail: grsmith@usgs.gov

Joshua I. Martinez (Data)
Telephone: (703) 648-7961
Fax: (703) 648-7975
E-mail: jimartinez@usgs.gov

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

LEAD IN JUNE 2003

Domestic mine production, based on the net quantity of lead recovered from concentrate, increased by 1% in June compared with production in May. Secondary refinery production increased by about 1% in June, and reported consumption remained essentially unchanged compared with the previous month.

According to Platts Metals Week published quotations for June, the average North American producer price remained about the same as in May, and the average London Metal Exchange cash price (U.S. dollars) increased slightly.

Demand for lead in North America remained steady in June following an unseasonably cool spring that effectively resulted in an unchanged rate of automotive battery failures. Industry analysts assumed that a prolonged summer of higher than normal temperatures would be necessary before any appreciable increase in the demand for replacement automotive batteries could be expected. In addition, the slow recovery of the U.S. economy with its inherent negative effect on new automobile and light truck purchases reduced demand for original equipment batteries. The production of primary lead is expected to decline by about 22,000 metric tons (t) during the remainder of the year, as a result of the extended closure of Noranda Inc.'s Belledune smelter in New Brunswick, Canada. The lower lead production in North America, however, was not expected to slow the increasing rate of exports to the European market. In Europe, the demand for lead in June began to slow as a prelude to the generally lower demand levels typically experienced in the summer months when producers and industry consumers close their operations for periods of vacation. However, it was anticipated that in the last quarter of 2003, the market for refined lead in Europe could become appreciably tighter as the effects of recent smelter-refinery closures in Europe become more pronounced (CRU International Ltd., 2003).

The National Defense Stockpile aggregated cash disposal (sale) of lead in June under the monthly Basic Ordering Agreement of the Defense Logistics Agency, DLA-Lead-005, was 3,850 t (4,244 short tons). Sales in the first 9 months of fiscal year 2003 (October 2002 through June 2003) totaled 50,413 t (55,571 short tons).

The Consumer Product Safety Commission (CPSC) confirmed the effective date of its final rule banning metal-cored candlewicks from commerce if they contain over 0.06% lead. The rule had been published on April 18, 2003. Upon receiving no objections to the rule and no requests for a hearing on the rule in the 30-day period following its issuance, the CPSC declared October 15, 2003, as the effective date for the rule (U.S. Consumer Product Safety Commission, 2003).

The Ad Hoc Metals Coalition, including U.S. producers, was briefed by a U.S. Department of Commerce official and several European metal industry representatives on a draft of a new policy issued by the European Commission outlining the manner in which chemicals, including metals, are assessed in the European Union (EU). The core of the policy, known as the REACH system, reverses the burden of proof about the safety of chemicals from regulators to industry. The responsibility for establishing this proof of safety extends to all metals, metal compounds, and metal-bearing products and wastes. The REACH system will apply to all chemicals and metals manufactured in or imported by EU countries. Metal products were to be included in the first phase of registrations required under the REACH system. At the briefing, the U.S. metals sector participants were urged by the European industry speakers to submit comments emphasizing, in part, the need to exclude minerals, ores, and concentrates from the REACH system. Comments about the importance of simplifying procedures for importing secondary (recyclable) raw materials under the system also were solicited (International Lead Zinc Research Organization, Inc., 2003).

The California Air Resources Board (CARB) recently approved modifications to the State's zero-emission vehicle program. Under the program, automakers will be allowed to meet emission requirements through the manufacture of an adjusted mix of battery-driven electric, hybrid-electric, natural gas-powered, and clean conventional vehicles. Alternatively, automakers can meet program requirements by the manufacture of an adjusted mix of hybrid, natural gas, and clean conventional vehicles if they produce the required market-weighted share of fuel cell vehicles. Total production of fuel cell vehicles by all manufacturers combined must total 250 by 2008, 2,500 by 2011, 25,000 by 2014, and 50,000 by 2017. Automakers will be allowed to meet

50% of their fuel cell-requirements through the manufacture of battery-driven electric vehicles (Advanced Battery Technology, 2003).

China's Jiyuan Gold Smelter in Henan Province recently completed the expansion of its refined lead capacity to 200,000 metric tons per year (t/yr) from the previous 150,000 t/yr. The company has projected a production of about 160,000 t in 2003. Full output is anticipated in 2004. Exports of refined lead in 2003 will likely be maintained at the 2002 level of 80,000 t (Platts Metals Week, 2003a).

Switzerland-based Xstrata plc completed the takeover of Australia's MIM Holdings Ltd., effective June 24. The cash offer for the major Australian mining company was approved by MIM shareholders on June 6. MIM sold 406,000 t of zinc and 274,000 t of lead in 2002 (Platts Metals Week, 2003b).

References Cited

- Advanced Battery Technology, 2003, CARB modifies zero emission vehicle rules: Advanced Battery Technology, v. 39, no. 6, June, p. 35.
- CRU International Ltd., 2003, Market Commentary: CRU Monitor—Lead, July, p. 2.
- International Lead Zinc Research Organization, Inc., 2003, U.S. metal sector briefed on Europe's new chemical policy: International Lead Zinc Research Organization Environmental Update, v. 13, no. 6, June, p. 2.
- Platts Metals Week, 2003a, Jiyuan ups lead capacity to 200,000 mt: Platts Metals Week, v. 74, no. 23, June 9, p. 11.
- Platts Metals Week, 2003b, Xstrata completes takeover of MIM: Platts Metals Week, v. 74, no. 26, June 30, p. 7.
- U.S. Consumer Product Safety Commission, 2003, Confirmation of effective date of rules declaring metal-cored candlewicks containing lead and candles with such wicks to be hazardous substances and banning them: Federal Register, v. 68, no. 124, June 27, p. 38176-38177.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2002		2003		
	Year ^p	January - June	May	June	January - June
Production:					
Mine (recoverable)	440,000	225,000	38,800	39,200	227,000
Primary refinery	262,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,100,000	535,000	91,900 ^r	93,100	547,000
Estimated	--	5,390	928 ^r	941	5,520
Recovered from copper-base scrap ^c	13,500	7,500	1,250	1,250	7,500
Total secondary	1,120,000	548,000	94,000 ^r	95,300	560,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	105,000	87,100	84,800 ^r	83,600	83,600
Imports for consumption:					
Ore and concentrates	6	--	--	NA	-- ²
Refined metal	210,000	122,000	27,400	NA	89,300 ²
Consumption:					
Reported	1,440,000	748,000	110,000 ^r	110,000	662,000
Undistributed ^c	--	74,800	10,900 ^r	10,900	65,500
Total	1,440,000	823,000	121,000 ^r	121,000	728,000
Exports:					
Ore and concentrates	241,000	58,500	9,030	NA	60,900 ²
Bullion	256	95	26	NA	369 ²
Wrought and unwrought lead	43,200	14,400	8,710	NA	33,900 ²
TEL/TML preparations, based on lead compounds	516	242	166	NA	353 ²
Exports (gross weight): Scrap	106,000	55,300	8,780	NA	41,900 ²
Platts Metals Week North American producer price (cents per pound)	43.56	43.63	43.60	43.61	43.58

^cEstimated. ^pPreliminary. ^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 - May only; June 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	
2002:				
June	43.53	439.65	296.32	1.483685
December	43.54	443.22	279.41	1.586295
Year	43.56	452.29	301.96	1.503145
2003:				
April	43.52	436.98	277.65	1.573873
May	43.60	463.10	285.45	1.622352
June	43.61	467.68	281.59	1.660876

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	May 31, 2003			receipts
Battery-lead	17,300 ^r	92,300	92,700	16,900
Soft lead	W	W	W	W
Drosses and residues	2,090 ^r	3,870	3,800	2,160
Other ²	3,320 ^r	3,180	3,380	3,120
Total	22,700 ^r	99,400	99,900	22,200
Percent change from preceding month	XX	+0.9	+2.0	-2.2

^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 not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP IN JUNE 2003¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	68,100	--	--
Remelt lead	W	W	W
Antimonial lead	22,600	W	W
Other ²	W	W	--
Total lead-base	93,100	41	339

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)

Uses	2002		2003		
	Year ^p	January - June	May	June	January - June
Metal products:					
Ammunition, shot and bullets	57,600	22,900	3,110	2,750	17,400
Brass and bronze, billet and ingots	2,730	2,290	348	296	857
Cable covering, power and communication and calking lead, building construction	3,550	393	461	373	2,410
Casting metals	34,800	3,910	447	448	2,690
Sheet lead, pipes, traps and other extruded products	27,900	9,290	1,400	1,230	7,610
Solder	6,450	904	169	169	1,060
Storage batteries, including oxides	1,190,000	668,000	98,000 ^r	98,300	592,000
Terne metal, type metal, and other metal products ²	24,600	848	5	10	39
Total metal products	1,350,000	709,000	104,000^r	104,000	624,000
Other oxides and miscellaneous uses	86,200	39,600	6,310 ^r	6,320	38,100
Total reported	1,440,000	748,000	110,000^r	110,000	662,000
Undistributed consumption ^c	--	74,800	10,900 ^r	10,900	65,500
Grand total	1,440,000	823,000	121,000^r	121,000	728,000

^cEstimated. ^pPreliminary. ^rRevised. -- 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.

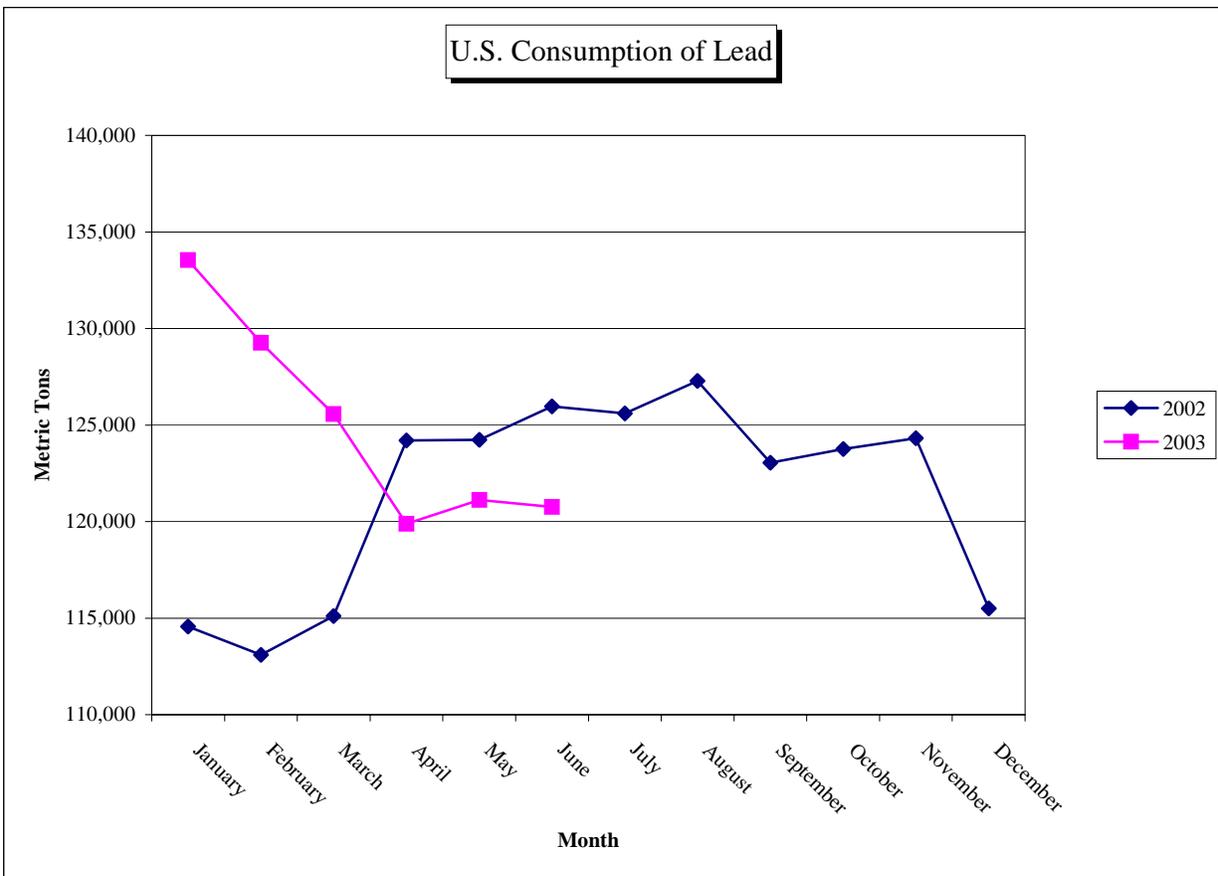


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks	Net receipts	Consumption	Stocks
	May 31, 2003			June 30, 2003
Soft lead	40,800	61,000	61,900	39,900
Antimonial lead	29,600	24,900	25,300	29,200
Lead alloys	W	22,500	22,500	W
Copper-base scrap	W	64	62	W
Total	84,800 ^r	108,000	110,000	83,600

^rRevised.

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)

	2002		2003		
	Year	May	April	May	January -
					May
Lead content:					
Ore and concentrates	241,000	8,180	21,200	9,030	60,900
Bullion	256	--	12	26	369
Materials excluding scrap	43,200	3,000	7,970	8,710	33,900
TEL/TML preparations, based on lead compounds	516	107	60	166	353
Total	285,000	11,300	29,200	17,900	95,500
Gross weight: Scrap	106,000	11,500	9,750	8,780	41,900

-- 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				
	2002		2003			2002		2003		
	Year	January - May	April	May	January - May	Year	January - May	April	May	January - May
Ore, matte, etc.:										
Other	6	--	--	--	--	6	--	--	--	--
Total	6	--	--	--	--	6	--	--	--	--
Pigs and bars:										
Australia	43,700	13,800	--	--	10,100	2,630	2,630	--	--	--
Canada	172,000	72,100	14,200	27,100	83,800	172,000	72,100	14,200	27,100	83,800
China	28,200	19,400	--	--	--	28,200	19,400	--	--	--
Germany	185	110	--	--	--	185	110	--	--	--
Mexico	7,460	3,220	630	318	5,380	7,460	3,220	630	318	5,380
Other	246	155	24	17	58	94	3	24	17	58
Total	251,000	109,000	14,900	27,400	99,400	210,000	97,500	14,900	27,400	89,300
Reclaimed scrap, including ash and residues										
	--	--	--	--	--	--	--	--	--	--
Grand total	251,000	109,000	14,900	27,400	99,400	210,000	97,500	14,900	27,400	89,300

-- Zero.

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

Source: U.S. Census Bureau.